

FEBRUARY 1960 • 35c

Trojan Cinderama

(See pages 7-11)



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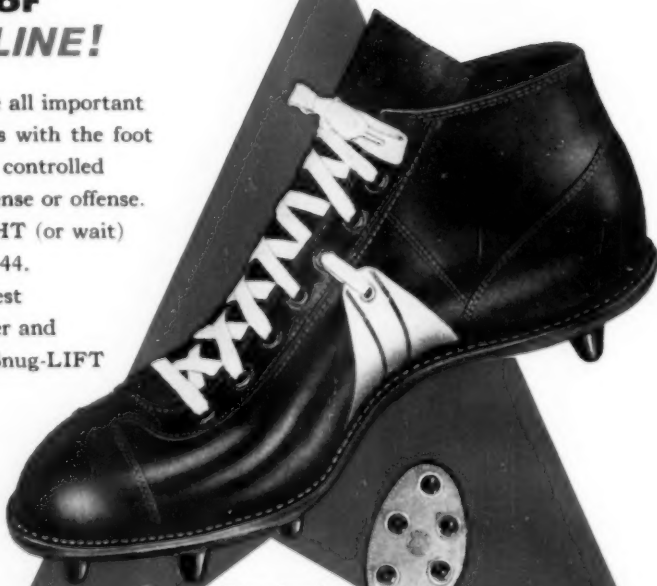
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Vitamin B ₆	16.0%	16.0%	16.0%	18.0%
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Bogalusa High School, Bogalusa, La.
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Boys Town, Kearney, N. J.
Boys Club of Lakeland, Lakeland, Fla.
Bradley High School, Cleveland, Tenn.
Browning High School, Browning, Mont.

Brush High School, Brush, Colo.
Bulkley High School, Hartford, Conn.
Clover School District #2, Clover, S. C.

College of Southern Utah, Cedar City, Utah
Colony Training School, Union Grove, Wisc.
Consolidated Schools, Stewartville, Minn.

Ensley High School, Birmingham, Ala.
Emory University, Atlanta, Ga.
East Feliciana Training School, Clinton, La.

Escambia High School, Pensacola, Fla.
Fort Benton School District #1, Fort Ben-
ton, Mont.
Fort Hays Kansas State College, Hays,
Kans.

Gaithersburg High School, Gaithersburg,
Md.
Hammond High School, Hammond, La.
Harvard Commercial High School, Har-
vard, Ill.

Hemfield Area Senior High School, Greens-
burg, Penna.
Hollow Hills Central School, Huntington
Station, N. Y.

Jones Valley High School, Birmingham,
Ala.
Jordan Vocational High School, Columbus,
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Fla.
McPherson College, McPherson, Kans.
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Marietta High School, Marietta, Ga.
Middle Tennessee State College, Murfrees-
boro, Tenn.

Mitchell County High School, Camilla, Ga.
Muskingum College, New Concord, Ohio
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La.

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Palmetto High School, Palmetto, Fla.
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Pearl River Junior College, Poplarville,
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Platt High School, Meriden, Conn.
Reserve High School, Reserve, La.

Roger Bacon High School, Cincinnati, Ohio
Shadyside Public School, Shadyside, Ohio
Somerset Area High School, Somerset,
Penna.

Southdown High School, Hauma, La.
Southern Missionary College, Collegedale,
Tenn.
Stafford Public School, Stafford, Kans.

Struthers High School, Struthers, Ohio
Urbana High School, Urbana, Ohio
Walker Junior High School, Bradenton, Fla.

Weaver High School, New Britain, Conn.
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Reg. U. S. Pat. Off.

VOLUME 29 • NUMBER 6 • FEBRUARY 1960

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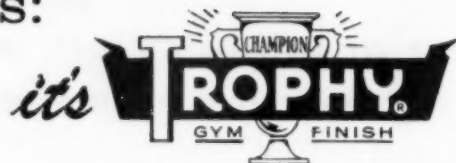
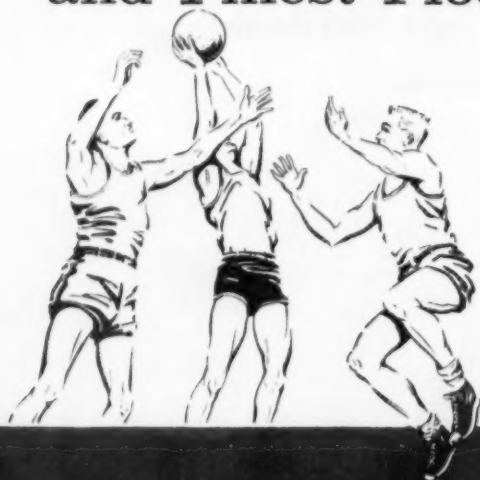
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CITY STATE



Arrogance, modesty and absurdity

WANT to know the All-American quarterback of 1961-2-3? It will be one of these eight kids: Tom Bilodeau, Don Caum, Perry Lee Dunn, Jack McCarther, Mel Renfro, Jerry Rhome, Jay Wilkinson, or Gary Wydman.

They're the quarterbacks on our ninth annual All-American H. S. Football Squad (see page 50). And the way we've been picking 'em over the years, we can't miss.

Look at some of the star qb's who first twinkled as *Scholastic Coach* All-Americans: Earl Morrall, Bart Starr, Ronnie Knox, Raymond Brown, Jim Ninowski, Lee Grosscup, Randy Duncan, George Izo, Charley Milstead, and Harvey White. Quite a line-up, eh?

Funny thing, when we entered the All-American business back in 1951, we did so with considerable trepidation. It seemed impossible to cull a Squad from 12,000 teams, which played practically all their games on a local level.

But when our bird-dogs started flushing out names like Kenny Ploen, Paul Rotenberry, Lamar Lundy, John Crow, Paul Hornung, Billy Cannon, Nick Pietrosante, Tommy McDonald, Jimmy Brown, Jon Arnett, Joe Walton, Jerry Tubbs, Hardiman Cureton, Bob Scarpitto, Ernie Davis, and Kyle Cruze, they convinced us.

Today we're downright arrogant about our Squads. When high school coaches start deluging us with nominations, when college coaches start beseeching us for pre-publication peeks at our Squad, and when the AP, UPI, and NEA wire services relay our choices from coast to coast, we know we've got something special.

HONEST-to-goodness modesty may not be as rare as a 3:56 mile or a beardless beatnik, but it's a precious virtue that always warms the cockles of our heart—particularly when the fellow who exhibits it really has something to be immodest about.

That's why our chapeau is off to Bob Timmons, coach of track, swimming, and cross-country at Wichita (Kan.) High School East. Since arriving at Wichita East three years ago, his clubs have won *seven state crowns in a row*; and Bob has had a hand in developing three nationally famous athletes—Jeff Farrell, current national 100- and 200-meter free-style champ; Larry Hyde, present national interscholastic 100-yard breaststroke record holder; and Archie San Romani, Jr., who ran the fastest schoolboy mile in history (4:08.9) last spring.

Yet Bob positively blanches when you mention the possibility of his having anything to do with this success story! When we asked him for a dossier of his coaching record (to introduce a series of articles he's doing for us), Bob obliged in a most remarkably unpretentious manner.

"Wichita East has won some 40 state team championships and numerous others in individual sports," he wrote. "But with the large school, high-caliber athletes, and great tradition we have, coaching isn't so much at a premium as it is in many smaller schools. So I can't take credit for this record in any way.

"Nor can I take credit for Jeff Farrell, even though I had the pleasure of coaching him in his senior year. Jeff had the rare opportunity of coming under the wing of three of the greatest swimming coaches the world has ever known in Matt Mann, Soichi Sakamoto, and Bob Kiphuth. After such great leadership, he went on to his present achievements.

"Insofar as Archie San Romani, Jr. is concerned, I've already told you (in a previous note) that my part in his over-all accomplishments was only of a minor nature.

"So, I can only say that I'm an average coach who's coaching in a fine school with great material to work with."

Fielding must have Timmons in mind when he wrote, "Thy modesty's a candle to thy merit."

EVERY time we watch a school or college basketball team play patty-cake with the ball for minutes at a stretch, the beast in us rises to the surface.

"Down with such absurdity!" we feel like bellowing. A team should be compelled to shoot within a reasonable interval. The pros have a 24-second rule, while the international (amateur) code subscribes to a 30-second limit. Both games, we feel, have it all over our school and college variety.

We've written quite a few compositions on this theme, much to the violent dismay of many of our readers. We've been called "know-nothings," "meddlers," "spoilers," and a lot worse. But the rock-throwers have failed to intimidate us.

Their chief argument always remains the same: "What's good for the pros isn't necessarily good for the schools and colleges. Since studies prove that our kids get off a shot every 15 seconds or so, why make it compulsory to shoot?"

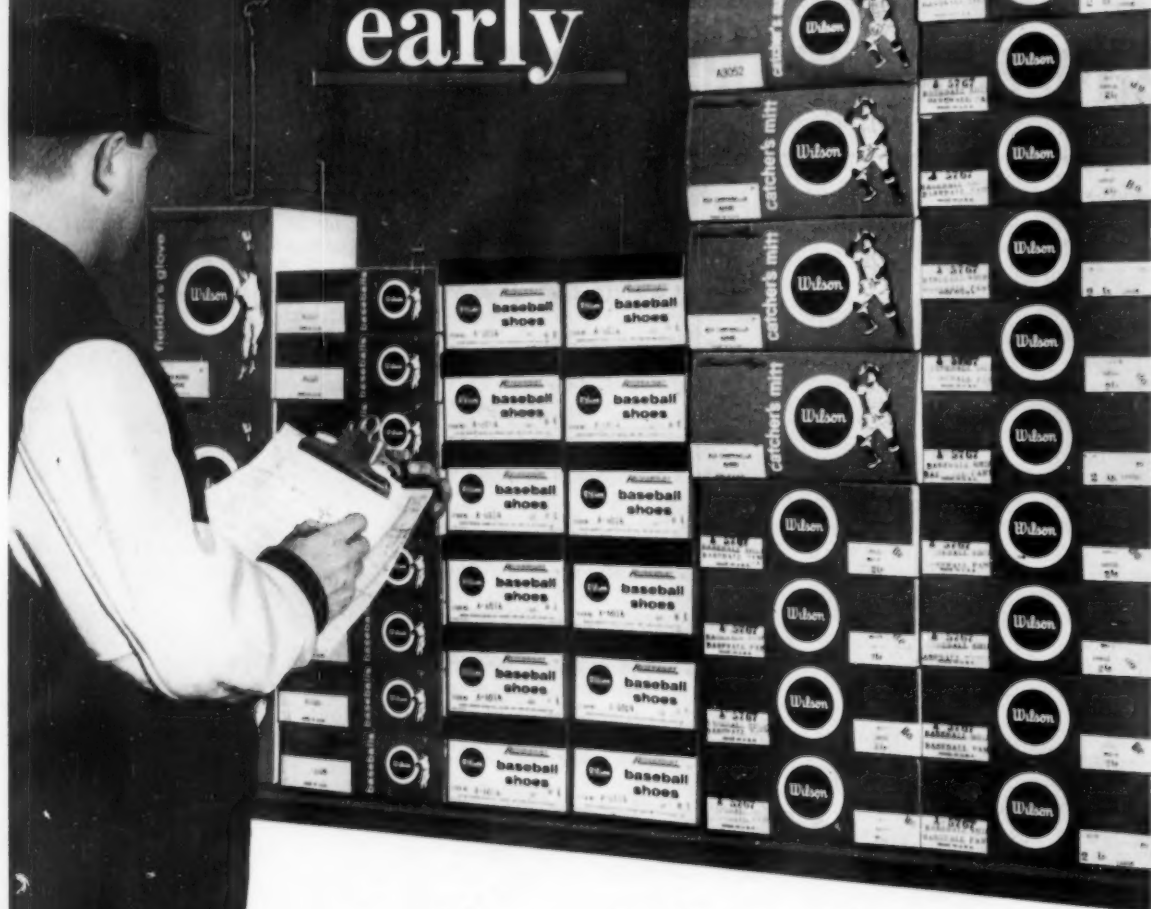
That's a pretty specious hypothesis. If the kids get off a shot every 15 seconds or so, isn't it safe to assume that a 30-second time limit won't work any hardship on them? So why not draft the rule? By making it compulsory to shoot, the rule can kill the slow-down and the freeze—a couple of abominations calculated to louse up any ball game.

We don't want to appear hard-headed about it. We've always tried to be objective. The trouble is no one has ever presented a solid argument against the time limit. That is, until recently, when Frank McGuire, the astute North Carolina coach, cropped up with this cogent thesis:

"I'm not in favor of the 24-second rule nor any time limit on shooting for the colleges. I believe it would put the premium entirely on recruiting. The pro game can definitely use such a time limit, as theoretically

(Continued on page 56)

He ordered early



...and he made the right choice...

WILSON BASEBALL EQUIPMENT

Smart coach. He ordered early, and he ordered from Wilson. He knows he can count on Wilson for top quality equipment and prompt delivery.

Wilson has been manufacturing quality baseballs, baseball gloves, shoes, uniforms and equipment for almost forty years... as long as modern baseball has been played. The coach has seen Wilson equipment give teams the confidence afield that makes champions. He wants the Wilson "edge" for this year's squad.

Since he's ordered early, the coach knows his order will move quickly and

smoothly through Wilson's modern plants, and be in his equipment cage in time for the season's opener.

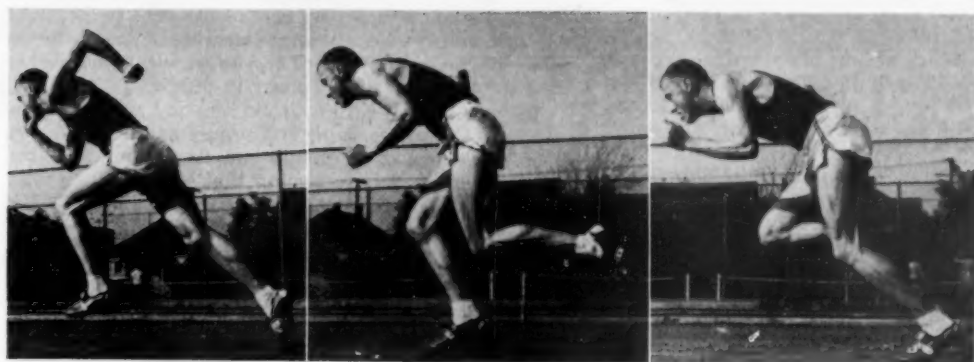
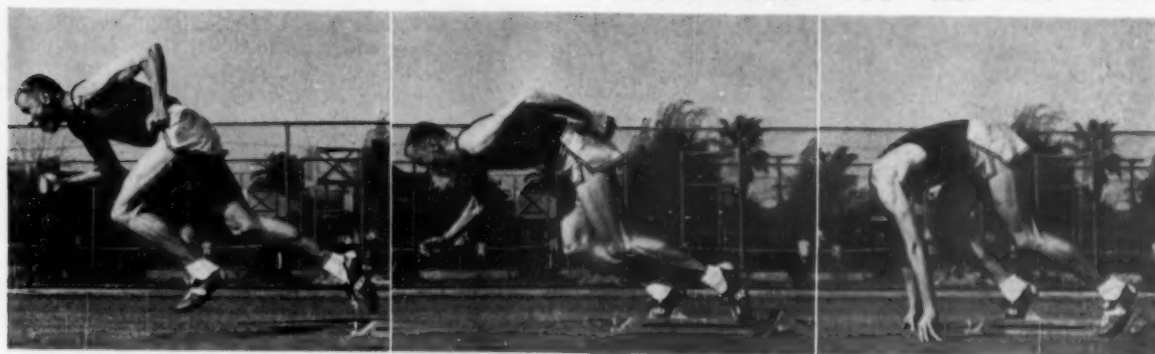
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BRUCE MUNN: 100-9.6: 220-20.8



TROJAN CINDERAMA

By JESS MORTENSEN

Head Coach, University of Southern California

SOUTHERN CALIFORNIA track teams have been achieving enormous success since Dean Cromwell, the "maker of champions," started turning out world record holders in 1923. His greeting of "Hi, Champ!", seemed to express his philosophy of coaching. The athlete's confidence in himself and his ability to become a champion was kept foremost in his mind, and we've tried to carry on this tradition since his retirement in 1949.

There are, of course, many things that must be done to help build that confidence and obtain the desired results. First you must have good facilities.

Southern Cal has a very fine quarter-mile practice track with six lanes and a nine-lane 180-yard straightaway. The surface is a 4-inch mixture of cinders, decomposed granite, and clay. Just under this layer is 3 inches of compressed "Palco Wool," ground-up red wood bark that gives the track a very springy feeling. This covers a layer of coarse gravel and rock with a system of drainage pipes.

The track takes water very well and drains very rapidly. Since it was installed in 1952, rain has prevented us from using it only twice!

The broad jump and pole vault runways are constructed of a special asphalt mix 4 feet wide and 150 feet long. The mix consists of 350 pounds of sand, 300 pounds of rubber buffings, and 300 pounds of asphalt. This layer is 1 inch thick over 3 inches of regular asphalt.

We've found this preparation most satisfactory. Any length spike or flats may be used and it's extremely durable.

The high jump take-off area is constructed of clay and decomposed granite. We feel that this type take-off is better than any type of asphalt for championship performance.

We have two shot-put rings of cement and one discus ring of the same material. Cement has proved the most satisfactory surface, provided it's properly buffed when constructed. The javelin is thrown on the infield from a short, cut-grass take-off.

Secondly, proper techniques and form must be worked out carefully with each individual athlete. The field events and the hurdles require more attention than the flat running events because the athletes' performance depends almost entirely upon proper form and technique.

Each individual, because of his build and muscle structure, will vary in his general technique, but we insist on a few very important fundamentals in each event.

A third point to consider is a regular, planned schedule of work-outs. Most of our men will work out between 2:30 and 5:00 each day. The first part of the work-out consists of proper warm-up and stretching exercises in preparation for the regular scheduled practice.

During the fall from September until December, all the runners from the 880 on up participate in the cross-country program, competing in about eight meets running from three to six miles. Their work-outs generally consist of fartlek, interval running, and some work on hill climbing.

Beginning the first of November, all other members of the team start regular work-outs. Most of them are on a three-days-a-week schedule on the track, with two days on a weight-lifting program.

An intelligent program of weight lifting has proven very valuable to all our track and field men, especially the field men. It's almost unbelievable to see the tremendous improvement shown by the shot, discus, and javelin men after intelligent use of the weight program.

The period from November first to January first is a general conditioning period. By taking a longer period of time, we assure fewer injuries and that the athlete will be prepared for the more strenuous program to follow.

Beginning January first, we go into our regular, planned work-out schedule of five or six days a week. Since our first meet will be held on the last week in February and our last meet the last of June, we must try to plan our training program so that the athletes

will be at their best, both physically and mentally, for the National Championships in June.

The program must be varied and interesting so that the athletes won't get mentally tired. It would appear that the longer they train the better they'll become physically, but we must guard against mental fatigue.

A fourth point that seems important is to impress the athletes that even though track and field is an individual sport, it's important to remember they're members of a team who have pride in the team's performance and that they're representing a fine University with a great tradition in track and field to maintain.

This is promoted by having the men work together and help each other in their event. We want them to be serious about their planned work-out, but to be relaxed and to enjoy every minute of it.

We also want them to be gentlemen at all times. On trips, our athletes wear a nice travel jacket with the University crest to assure making a good impression wherever they go. They must wear the jacket and tie whenever they appear in public.

In conclusion I'd like to express my views on the subject of "form running." We must admit that we've seen track men of all shapes and sizes, using all types of arm action. It's my feeling that the arms are used for balance and rhythm.

In running distance races, the arms should be carried rather high with very normal motion. Vigorous arm action only tends to use up valuable energy.

When sprinting at the finish, the arms are used more vigorously to help propel the body along. Let the athlete run the way that's most natural for him.

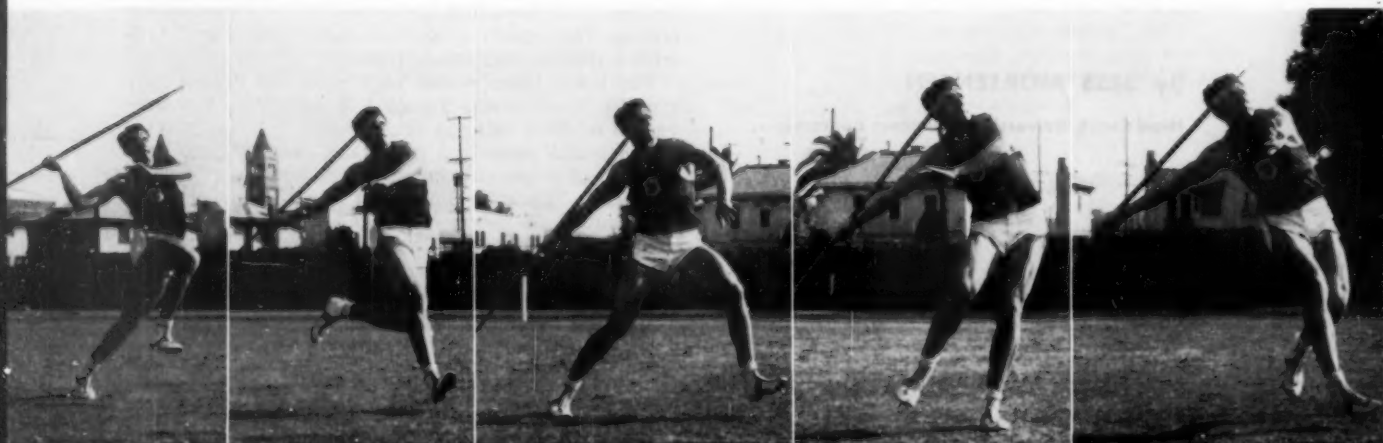
Length of stride is determined by body build and muscle structure. Probably the one thing to guard against is overstriding, because we know that overstretching the muscle will cause fatigue.

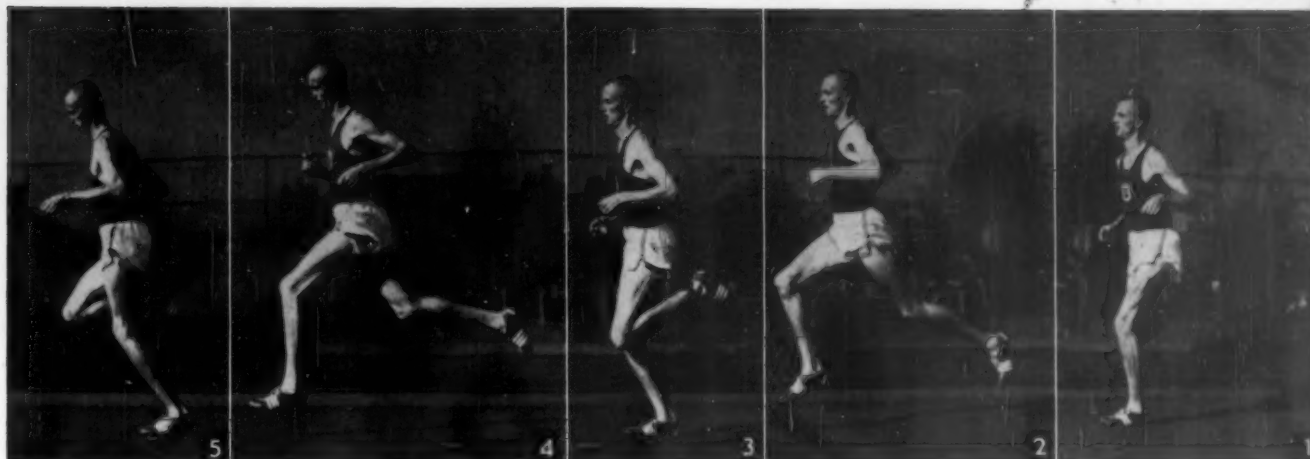
Field-event men and hurdlers must necessarily use certain definite techniques and proper form to achieve the best results. But here again each individual because of build and muscular differences will look a little different when performing.

It's a mistake, for example, to demand every shot-putter to use the so-called O'Brien form to achieve his best performance. You may be depriving him of his natural capabilities. It's possible he may not have enough natural quickness and leg strength to get as low as O'Brien does.

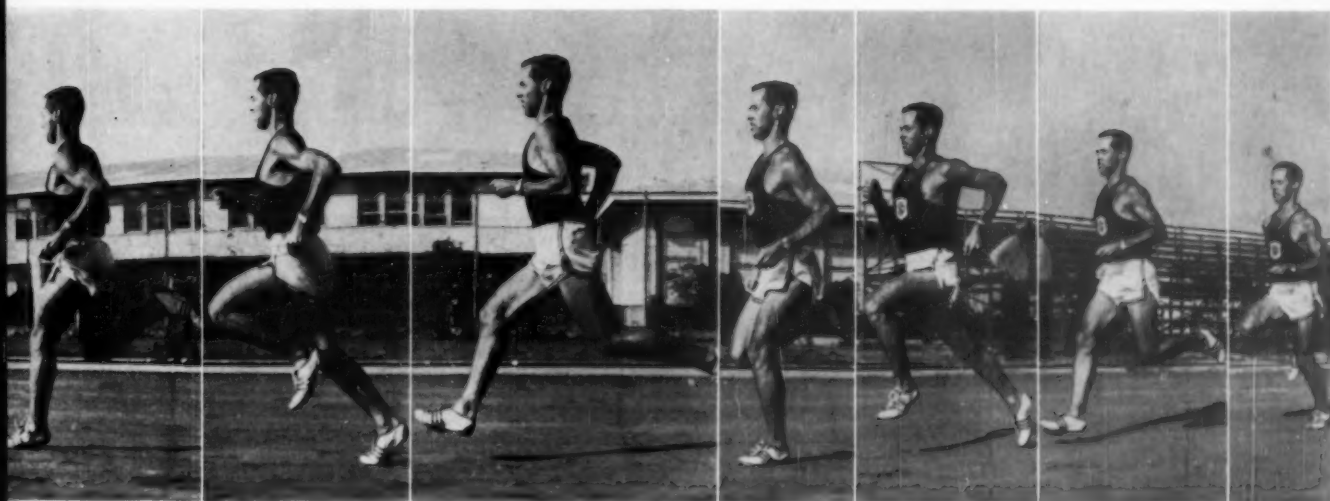
Insofar as possible, try to improve on the athletes' natural talent.

BOB SBORDONI, 237-4½



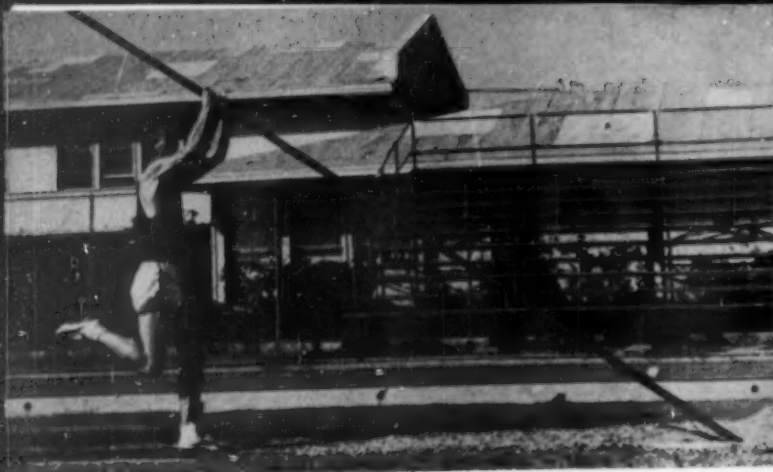


WAYNE LEMONS: 880—1:50.9; MILE—4:10.2

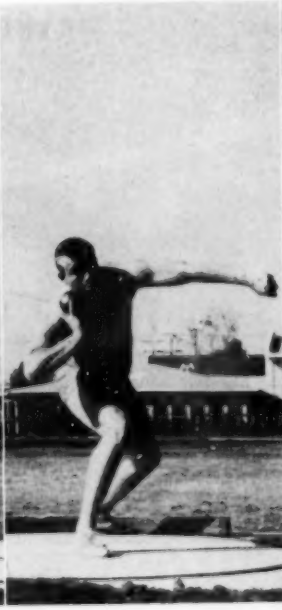


TONY SMITHERS: MILE—4:24; 2 MILES—9:15



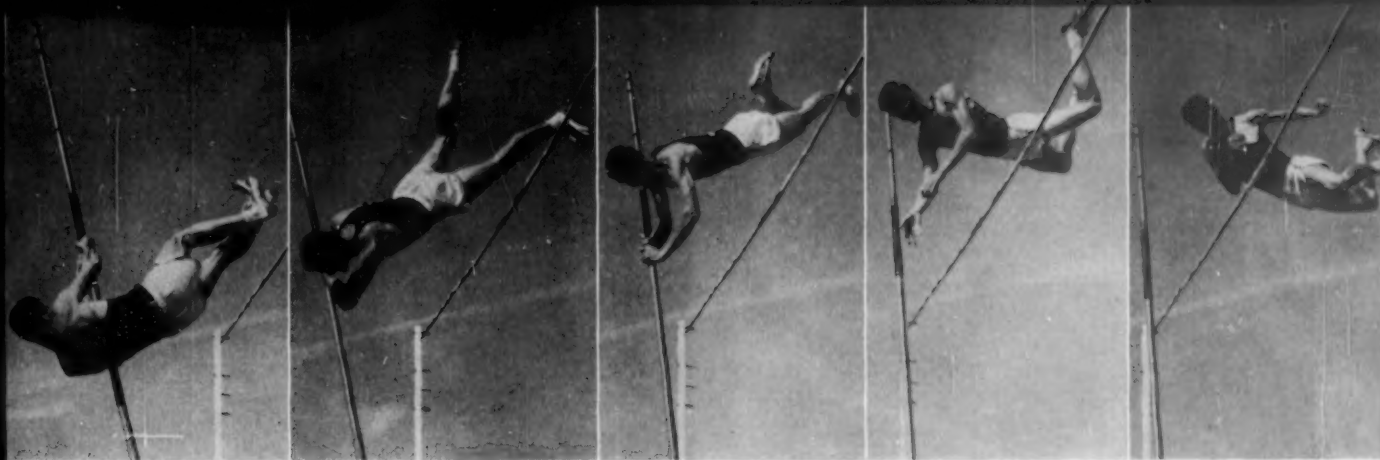


JIM BREWER, 15'

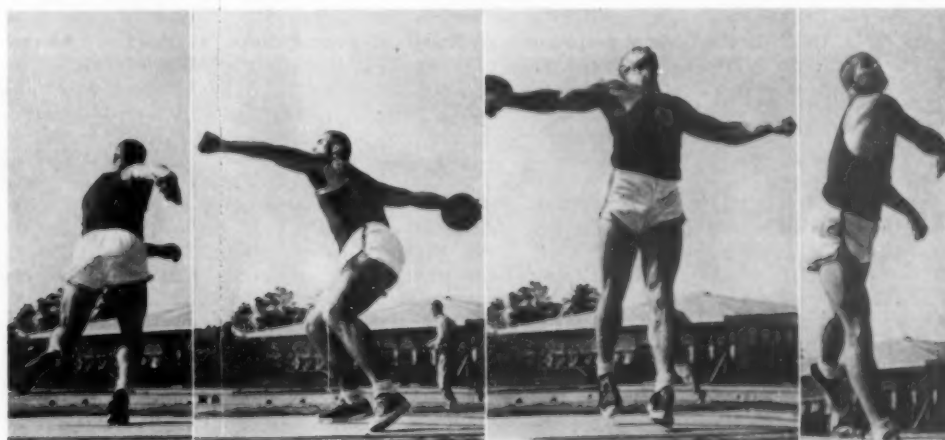
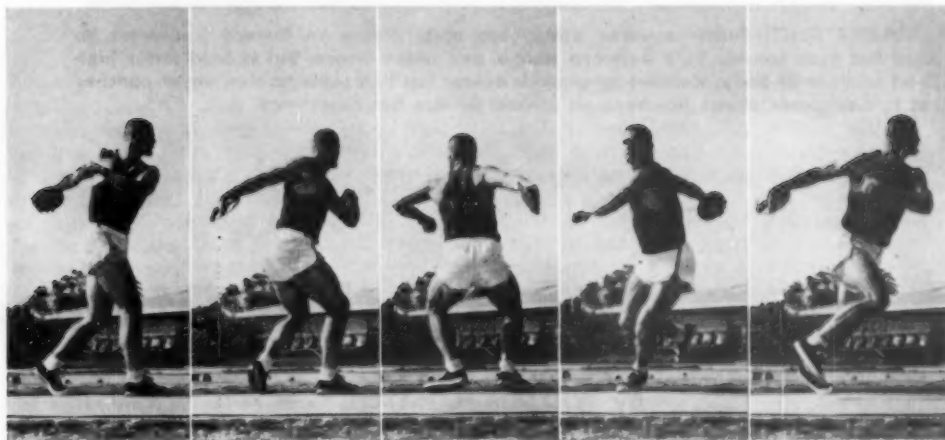


DALLAS LONG, 63-7

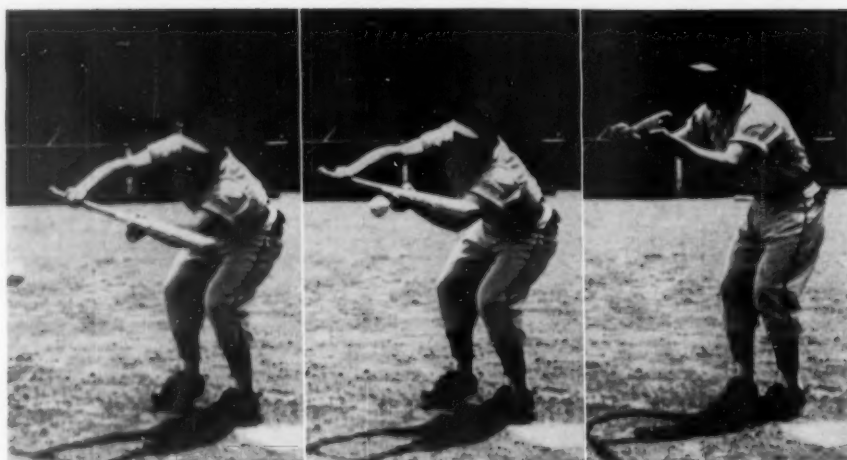




MIKE McKEEVER, 159-3½



CHARLIE DUMAS, 7-½



SACRIFICE BUNT: Bunter squares away, top hand sliding up toward trademark so that bat rests loosely in V between thumb and index finger. Bat is held letter high well in front of body, parallel to ground. Bunter lets ball come to him, never punches at it, and never draws bat back on contact or tips bat downward.



The Bunting Offense

By **WILLIAM H. HATCH**, Coach, Porterville (Calif.) High School

THANKS to the present emphasis on the long ball, bunting is becoming a lost art. Even in the major leagues, where near perfection in skills is found, the players evidence an inability to lay the ball down when necessary.

Skill in bunting is a necessity at the high school level for a number of reasons:

1. A high school team is fortunate to have more than one or two consistent hitters; therefore bunting is a must for getting runners on base, advancing runners, and driving in runs.

2. Bunting improves hitting, as it's the best known means of acquiring and developing timing.

3. A bunting team upsets the defense, for the infield is never quite sure whether to play in or back.

4. A bunting game will tire the pitcher out, causing him to lose his speed and control.

5. Bunting will raise the batting

potential of poor hitters, as most of them have a greater chance of beating out bunts than of hitting safely.

THE SACRIFICE BUNT

The basic and easiest bunt to execute is the sacrifice. In this bunt the batter squares around facing the pitcher just after the pitcher completes his stretch. In squaring around, the bunter pivots on his front foot and brings his back foot forward and toward the plate.

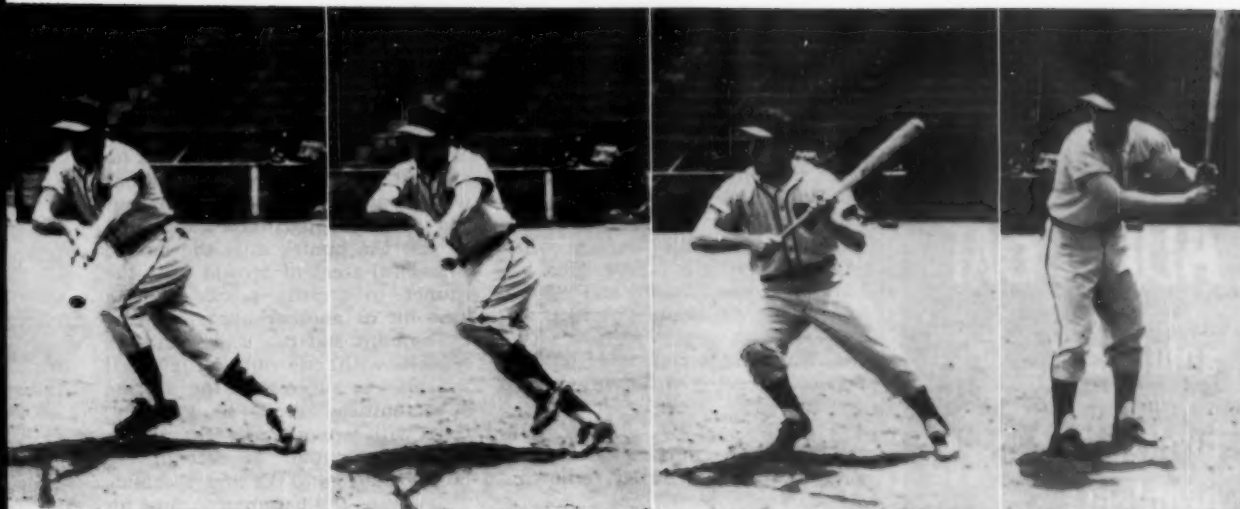
In most cases it's important that the front foot not be pulled out toward foul territory while bringing the back foot forward, otherwise the outside corner will be hard to reach.

Pulling the front foot back in the squaring process also increases the bunter's chances of bunting the ball foul, as his bat isn't as likely to be over the plate but back of it.

As the body pivots, the top hand slides up the handle of the bat toward the trademark and the bat rests loosely in the V between the thumb and index finger. The body assumes a crouching position with the weight slightly forward over the balls of the feet.

The bat is held well in front of the body, parallel to the ground and letter high. The letter-high position should be stressed, for the only adjustment to the vertical location of the ball will be downward. Any pitch above the bat will be out of the strike zone and the bunt should not be attempted.

When laying the ball down, the bunter should try to "catch" the ball on the end of the bat. If the bat is held loosely, the impact of the ball will drive the bat back into the hands and a dead bunt will result. The bunter should always let the ball come to him and never attempt to punch at it.



DRAG BUNT: As pitch comes in, batter executes half pivot on both feet and slides top hand up handle, holding bat loosely. Back foot crosses over and top arm

begins to straighten as it pushes ball to desired angle (down base line). Note fine parallel position of bat and how eyes follow ball right to contact.

By the same token, he should never draw the bat back on contact with the ball. The bat should never be tipped downward for the low pitch, but be brought down parallel by crouching the body more and lowering the arms. We tell our bunters to imagine that a quarter is resting on the barrel of the bat and if the bat is tipped, the quarter will slide off.

The direction of the sacrifice bunt is determined by the action of the lower hand. By pulling back slightly on the handle of the bat, the bunt will be pulled down the base-

line. By pushing forward on the handle, the bunt will be pushed down the opposite baseline. The upper hand acts as a swivel for the bat to turn on as the lower hand pushes and pulls.

When attempting to advance a runner from first to second, we like to put the ball down the first base line, especially if the first baseman is right-handed, because of the difficulty of the throw to second.

When advancing the runner to third, the first-base line is again preferred if both pitcher and first baseman are right-handed. Other-

wise the bunt is laid down the third-base line, forcing the third baseman to make the play. Above all, don't bunt the ball directly back to the pitcher in any sacrifice situation.

It should be emphasized, in teaching the sacrifice, that the most important consideration of this bunt is advancing the runner and not beating the bunt out. The utmost care should be taken to insure that the ball is bunted accurately and correctly before the batter breaks for first base.

Although the sacrifice bunt is the



DUMP BUNT, used by right-handers to tap ball down third-base line. As in drag bunt, top hand slides up

handle and bat is extended parallel to ground. Bat is gripped loosely and eyes follow ball.

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basic bunt, it shouldn't be used indiscriminately. The times to use a sacrifice bunt are as follows:

1. In the first four innings of a close ball game where it will advance two runners, particularly with a weak hitter up.

2. After the fourth inning when the tying or winning run is on first and the runner is slow.

3. In the middle innings when ahead or not over three runs behind, less than two out and a weak hitter, who's a double play threat, at bat.

4. Any time a slow runner is on first or second, a weak hitter is up and the game is close.

5. In the last two innings with the tying or winning run at first, no outs and a good hitter following the bunter.

The situations listed above differ somewhat from the strategy employed by major league managers, but we've found them consistent at the high school level.

THE BUNT-AND-RUN

The bunt-and-run plays are daring bits of strategy which may be attempted at any point in a close game or when ahead. In the bunt-and-run, the runner attempts to advance two bases on the sacrifice instead of one, breaking for the next base on the pitch instead of waiting until the ball is safely bunted.

If the bunter misses the pitch, a steal is in progress. If the ball is bunted into the right area, however, the runner continues on around to the next base. In this situation it's doubly important for the bunter to eschew any thought of beating the bunt out. His only thought should be to lay the ball down perfectly.

If the play is to be successful, the bunt must be hard enough to pass the pitcher, but slow enough for the desired fielder to have to charge in for the play on the bunter.

The mechanics of the bunt-and-run are the same as for the sacrifice except that the player must tighten his grip on the bat to insure a harder bunt which will carry past the pitcher. There's little danger of forcing the runner on a hard bunt because he has broken with the pitch. The only danger is a bunted fly and then a double play will surely result.

As a bunter cannot choose the pitch he wishes to bunt, as he does on the sacrifice, we try to make sure he receives a good pitch by calling the bunt-and-run when the batter is ahead on the ball-and-strike count and the pitcher will have to come in with a strike. Two-and-nothing and three-and-one are ex-

cellent bunt-and-run counts.

In advancing a runner from first to third, the bunt should be directed to the third baseman so the base will be left unguarded for the runner rounding second. The most logical time to call this play is with no one out. If it succeeds, the runner will be at third with only one out and several opportunities to score. Should the bunter miss the ball, a successful steal of second puts the runner in scoring position for a base hit or another bunt and run.

The bunt-and-run isn't worth the gamble with one out, for even if the play is successful, the scoring opportunities aren't as great at third with two outs as with one out.

With a runner at second, the bunt should go to the first baseman. This causes the baseman to turn his back on home to throw to first or to race the bunter to the bag. If he throws to the second baseman covering first, time will be lost while the second baseman recovers his balance, turns, and throws home. The same loss of time will result if the first baseman races the bunter to the base.

The bunt-and-run from second is a good gamble with no one out or with one out, although the former presents more possibilities.

THE SQUEEZE PLAY

The squeeze may be attempted any time one run is important. We've occasionally employed the squeeze successfully with two out. We use only the suicide squeeze in which the runner breaks for home on the wind up of the pitcher.

The bunter uses the same mechanics as in the sacrifice, except that he's free to lay the ball down anywhere he's able. This type of squeeze will score all but the exceptionally slow runner. As in the bunt-and-run, we generally attempt the squeeze on a favorable ball-and-strike count.

The double squeeze is used to good advantage in some situations. This type of squeeze attempts to score not only the runner from third but the runner from second as well. The play is executed exactly the same as the bunt-and-run from second. It's recommended that only the best bunter attempt the double squeeze, for the necessity of laying the ball down in one spot is crucial.

BUNT FOR A BASE HIT

One of the most beautiful plays in baseball is the successful surprise bunt. In bunting for a base hit, the batter must wait until the last possible moment (Concluded on page 37)

A BETTER GAME BEGINS WITH

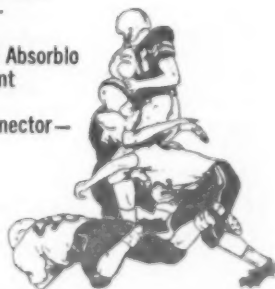
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BASIC COACHING POINTS

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WEIGHT EVENTS

IT'S EVIDENT from watching numerous high school performers execute field skills, particularly in smaller high schools, that they've received little basic instruction.

This isn't always the complete fault of the coach, since he's often required to spend most of his time and energy in numerous other areas, leaving little time for effective field coaching.

It shouldn't be unreasonable for any coach, no matter how busy he may be, to know and be able to teach a half-dozen or so basic coaching points for each field event. The material in this paper has been compiled for just such a situation.

Following are some of the elementary techniques that field coaches must implant in their charges to give them the potentiality for respectable performances.

SHOT PUT (O'BRIEN STYLE)

1. The shot rests on the fingers and hardly touches the palm. This will enable the athlete to get more effect from the wrist snap, because the shot is out on the end of a longer lever.

2. The hop from the back of the circle to the middle covers approximately half of the distance and should involve a limited amount of vertical movement. The desired objective is to move through this distance as rapidly as possible.

3. Upon landing after the hop, the putter is in a position with the leg flexed to the degree he can control. The control depends on the strength of legs. The lower the putter crouches, the greater the distance through which the shot can be accelerated.

4. The landing in the middle of the circle finds the individual facing in the same direction as which he started. This position places the shot at a point that will require more distance through which to move before the release, than if the thrower was partly turned in the direction of the throw upon landing in the middle of the circle.

5. The actual rotating of the body for the throw is initiated by the hips. This process will cause the

large leg and hip muscles to develop a maximum amount of torque, which will aid in "pulling" the upper body around.

6. When the free arm is thrown back vigorously, it will transfer momentum to the rotating upper body.

DISCUS

1. To start the throw, the athlete should face the opposite direction at the back of the circle. As the discus is placed as far behind the back as possible, the left foot should be moved forward a few inches ahead of the right foot. This small maneuver will enable the thrower to rotate the discus farther to the rear of his body and increase the distance through which to develop momentum. This step also gives the thrower a chance to make his initial pivot on the left foot farther back in the circle and to obtain more room in which to accelerate.

2. The initial movement from the back of the circle should be a dynamic step over by the right leg, pivot on the left foot, and lunge to the center of the circle. The vigorousness of this move is very important. The quicker the potential energy can be turned into kinetic energy, the more time can be spent building up a greater amount of momentum.

3. All the way through the rotating maneuver, the discus trails behind the body. The discus is not higher than hip level. It's not until the body faces the direction of the throw that the arm starts the throw. Up until this point the body has been pulling the discus around.

4. The degree of leg flexion is a common problem. If the individual can handle a great amount of flexion,

he'd have a greater distance through which to move and develop momentum as he straightens up to throw. The amount of flexion of the legs is an individual matter. Great amounts of flexion require great leg strength.

5. The trailing leg should be kept in close to the body when rotating. A long trailing leg lever will reduce the speed of rotation.

6. When starting the delivery with the arm, be sure the arm is straight. The longer the lever, the greater the speed and force.

JAVELIN

1. The last steps of the approach, no matter which style is used, should place the body in a position so that the side is facing as much as possible in the direction of the throw. This will enable the thrower to have the javelin farther behind him and provide a greater distance through which to move the javelin to build up momentum.

2. When the thrower plants the lead foot, he should place it to the right of a line perpendicular to the center of the body in the direction of the throw. This will develop a greater amount of torque in the trunk and "pull" the upper body around faster.

3. The actual delivery of the javelin with the arm isn't to be hurried. The upper body pulls the javelin around until the upper body is perpendicular to the direction of the throw, and then the throw by the arm begins. If the arm action begins too early, much of the potential force that can be supplied by the rotation of the body won't be used.

4. The throw is initiated by the chest and shoulder muscles, with the elbow leading. The reason for the elbow leading is to add the elbow and wrist pronating muscles to the act.

5. The arm should be flexed when throwing. Most throwers aren't strong enough to handle the weight of a javelin on the end of a long lever such as a straight arm. Flexing the arm shortens this lever, enabling the thrower to move the javelin through the throwing arc faster plus being able to use the pronating muscles of the arm.

By **TOM NEUBERGER**, Coach, North Dakota State College



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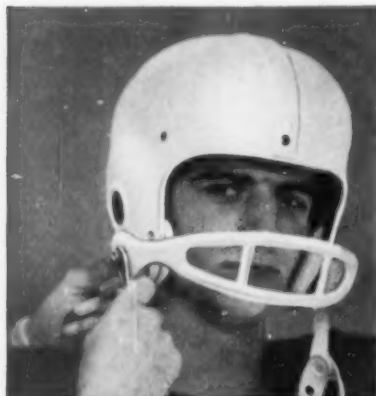
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BROAD JUMP

1. The run in the approach should be at least 110 feet. It takes this much distance for most performers to obtain full speed.

2. The last stride to the toe board should be 4 to 12 inches shorter than the preceding ones. This is necessary to move the body's center of gravity closer to the front edge of the base of support, so there won't be as much resistance when rocking over the foot. This will also enable a jumper to transfer some of his horizontal momentum into a vertical direction.

3. The jumper plants his foot on the take-off board in a flat-footed manner. This will allow for maximum distance through which the foot can plantar-flex and develop maximum force. This action is a definite heel-toe rocking action.

4. The free leg and opposite arm must swing up vigorously to get a maximum transfer of momentum from these limbs to the body. The knee leads this vigorous action of the leg, because it can swing through much faster when the knee is flexed and the leg lever shortened.

5. A lack of height in the broad jump is a primary error of inexperienced jumpers. If adequate height is attained, gravity will have a greater distance through which to pull the jumper down to the pit.

6. The legs extend out in front of the body upon landing after the jump. The forward momentum of the body will carry it over the extended base of support, unless perhaps the jump didn't contain adequate height.

POLE VAULT

1. The vaulter should get an adequate run of 90-100 feet to develop near maximum speed. It's possible to run too fast for the vaulting ability. But the main error is to run too slow, so that not enough force is generated to overcome the resistance caused by planting the pole.

2. The height of the grip for beginners is approximately 10 feet from ground level. After the rudiments of form are learned and the height that can be made increases, the grip may be raised to 10'6" or 10'9". This grip is maintained until the performer is able to achieve a height of from 12 to 18 inches higher than the grip.

3. The take-off leg is the inside one. This will improve balance when one foot is on the ground and the sole base of support is close to the pole.

4. The foot of the take-off leg is planted at a spot directly below the

handhold on the pole. It's necessary to have the center of gravity over the base of support to assure maximum lift.

5. The pole is planted with the arms flexed to absorb the shock caused by the abrupt halt of the kinetic energy when the pole is placed in the box.

6. The swing-up on the pole is initiated by a vigorous kick of the outside leg. This kick is led by the knee. Don't straighten the leg, because a kick led by the knee in a flexed position can transfer momentum more rapidly.

7. The pull-up isn't started before the pole has passed an angle of approximately 55° and the hips have swung up as high as the hands. As the performer leaves the ground, he should just hang on with his arms, "ride the pole," until the proper point, and then pull up in a dynamic manner.

HIGH JUMP (BELLY ROLL)

1. Many jumpers take off too far from the bar. Generally an arm's length perpendicular from the bar is the proper distance. Taking off too far from the bar will result in too much effort going forward instead of up. Also, the height of your jump may be reached before getting over the bar, and the bar may be knocked off coming down.

2. The foot should be planted with the heel first and the last stride lengthened. This is to check the forward motion almost completely and transfer it to the upward motion.

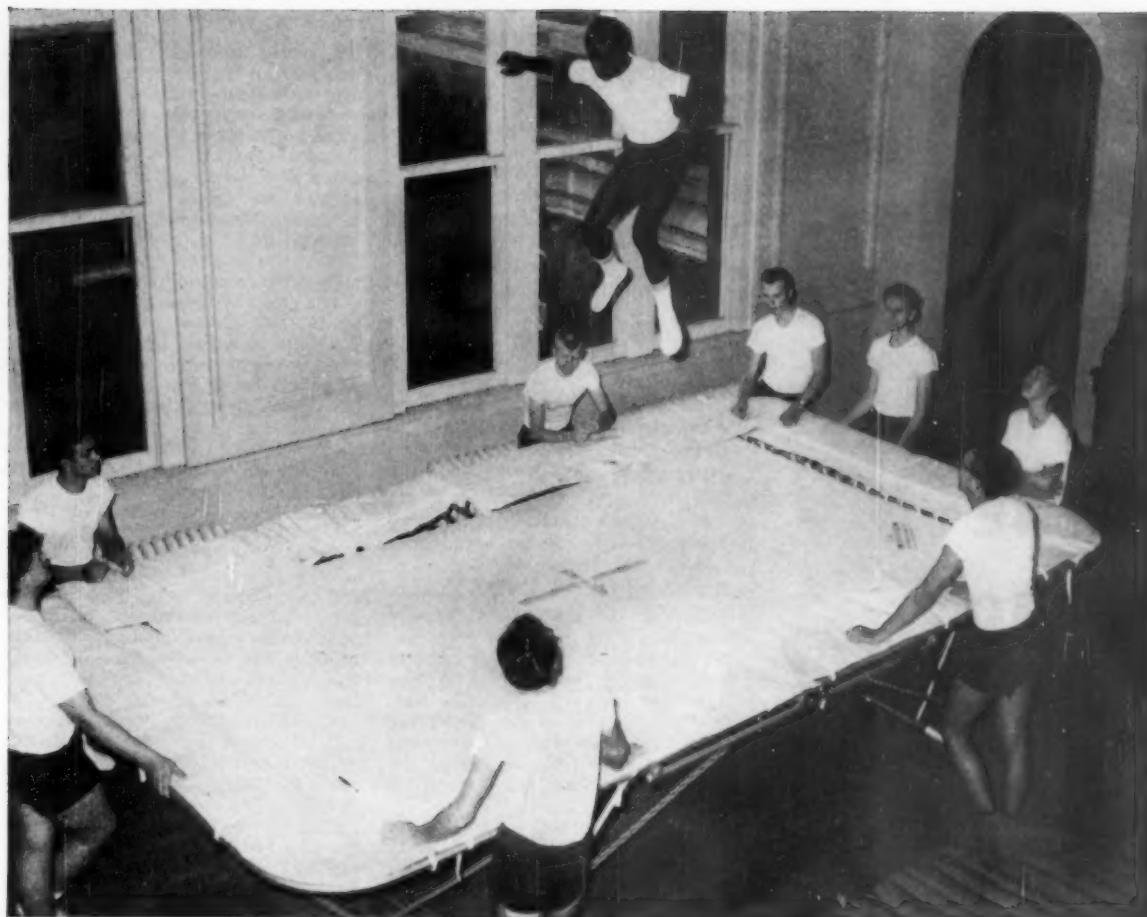
3. The foot should be in line with the run, approximately 45° from the bar. This is important so the roll won't be started prematurely while still on the ground.

4. The trailing leg should be swung through as straight as possible. This will enable the lever to be as long as possible and increase the amount of momentum transferred to lift the body at the end of the kick.

5. When kicking, the athlete should almost imagine he's kicking a football as hard as possible. The kick shouldn't be straight up, but slightly at an angle toward the bar to initiate the roll.

6. The opposite arm is thrown up as vigorously as the kick is executed. This increases the degree of transfer of momentum.

7. When the jumper is on top of the bar, he should lay with the body straightened out as flat as possible. The characteristic "pike" position with the butt high only makes it necessary to lift the center of gravity higher to keep from knocking the bar off with the legs.



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Learn from the Gifted: THE SHOT PUT

By **RICH HACKER**

Coach, Berkeley (Calif.) High School

ONE of the many things that makes track and field such a fascinating and yet frustrating sport to coach is the diversity of skills involved in the many events.

Lucky is the coach who starts with a fairly clear understanding of one or two events, a nodding acquaintance with a couple of others, and at least a realization that there are a "few other events" that will probably decide the outcome of most of his meets.

For the writer, the events most heavily shrouded in uncertainty were—and to a certain extent still are—the weight events. Since these events offer the most difficulty to beginning coaches, I believe it would be most interesting and informative to present in logical sequence some of the essential coaching points I've learned through the best coaching course extant—from close-range observation of gifted athletes, from talking with them, and from encouraging and aiding their self-analysis.

"Practice makes perfect" is a theme I've constantly stressed with the two best weight prospects I've ever had. Both have convinced me that there just isn't enough time in a normal practice to even concentrate on the mechanics, let alone work much on running, calisthenics, etc.

By "a normal practice," I mean an hour and 45 minutes. If you have to go beyond that, you're spending too much time on a part of life that should be fun, not a full-time job. So we throw, throw, throw—put, put, put—working up through the phases of the event for good but not maximum distance.

Of course both of these men were big, strong, and quick to begin with, and kept in shape during the off-season with a mild weight program and continued observance of training rules.

Gordon Stevens, 5' 9", 190 lbs., graduated last spring after throwing the college disc 127' as a soph and 132' as a junior, then tossing the high school disc 165' 11½" as a senior last spring (when the smaller disc was officially adopted throughout California).

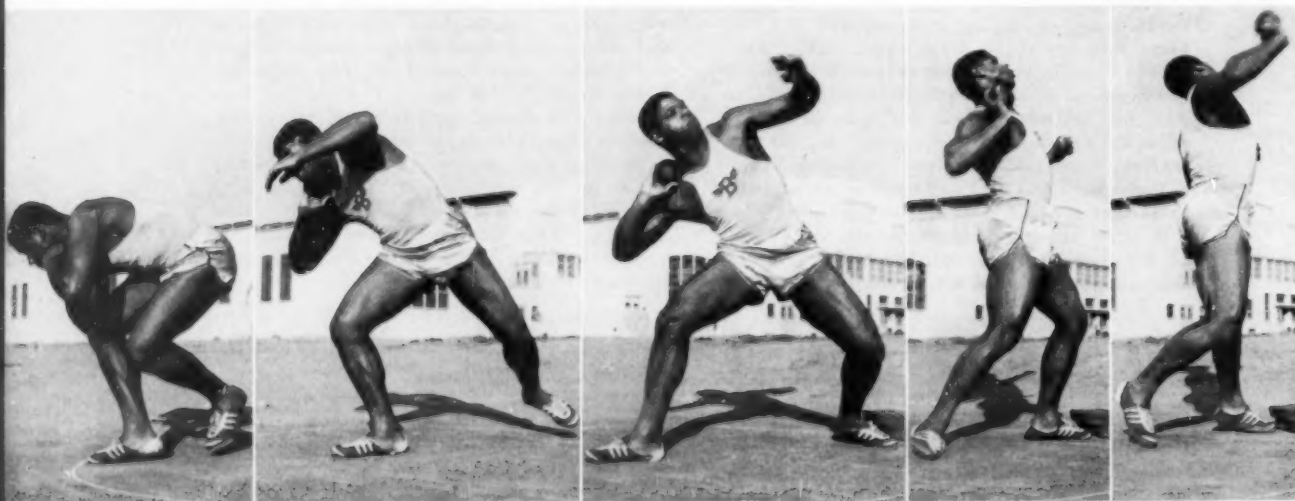
The other fellow is Mathew Baggett, 6', 230 lbs., a senior this spring, who put the 12-lb. ball 48' 6" with only a month and a half's work as a soph (started the season late and barely missed qualifying for the big meets the last month of the season). As a junior last spring, he reached 58' 11½" with the 12-lb. shot and 49'0" with the 16 lb. (used infrequently).

The cliché—"Some won't learn no matter what you do, while others will learn in spite of what you do"—is of course an exaggeration. But we mustn't sell short the importance of good and ever-improving facilities in encouraging participation, making practice more efficient, and increasing the fairness and pleasure of competition.

A few bags of cement, a little gravel, a few iron rods, and a great deal of sweat will produce a disc or shot circle that even "Jumbo the Elephant" couldn't dent. A more temporary and perhaps less effective solution is the use of a portion of an outdoor black-top asphalt area for the circle. The circle can be painted or chalked on. Of course, the rougher the surface the better.

Now, if each man can be issued his own implement, the stage will be set for the achievement of maximum

Photos by Bob Collins

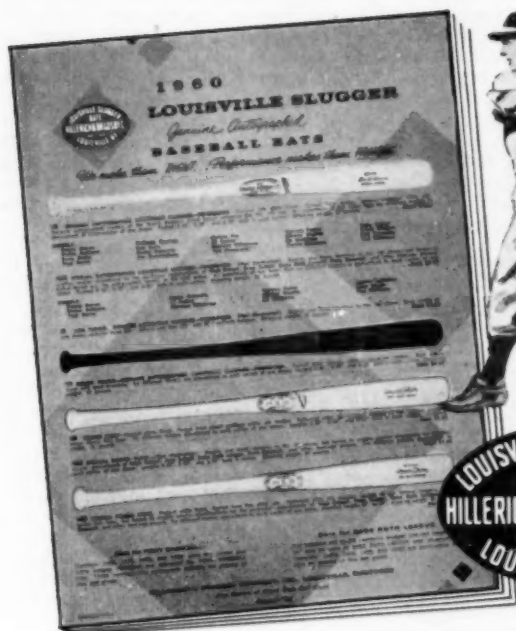


Analysis of Mathew Baggett, Berkeley putting "phenom":
No. 1: Right leg is flexed to almost optimum 90° angle.
No. 2: Touching position is good, right leg just starting to push, left leg looks as if it's pulling just a little too much backward.
No. 3: Left arm, head, right arm are in good

alignment, hip rotation hasn't started soon enough, distance between feet may be a bit too much. No. 4: Shot is a little too low in hand and fingers, head is good but beginning to fall away.
No. 5: Head has fallen away, arm is a little late in final push, right leg beginning to come through.

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The psychological effects of the "heavy" work probably are of some value. I push the point, "Boy, that little ball ought to go at least 10 feet farther than the heavy one."

Probably all of us could give more attention (in practice) to finding the ideal warm-up for competition, so that the best throw will never come before or after official competition.

It seems logical that when the man comes down too quickly from his upright preparatory position to the crouching position he'll carry across the circle, he's almost sure to establish shot momentum in the wrong direction, i.e. either down or back rather than on the forward upward curve across the circle.

It's hard enough to get that ball rolling in the proper direction from a dead stop, to say nothing of trying to reverse its direction of momentum. Even a "dipping" motion is liable to set up a wave-like progression of the shot across the circle that will make somewhat less efficient use of the power exerted behind it.

Two things we strive for, then, are (1) a smoothly accelerated upward moving curve as the shot's line of flight while we're in contact, and (2) a smoothly accelerated rate of movement culminating, not beginning with, an explosion. All actions are aimed at achieving these goals.

A good illustration of this "controlled or slow-motion explosion" is the use of the arms in moving water efficiently in the crawl stroke. Whenever you exert all your power and maximum arm speed, you lose energy and efficiency. You're no longer being helped by the fact that the water gives you something more or less solid to pull and push against.

This is the same type of action we must achieve in all our events to obtain maximum results—namely a controlled action habit pattern.

We use the O'Brien rear-facing starting position. But in order to assure travel along the diameter of the circle, rather than the "short cut" that leads to a falling away at the climax, we've found it essential to position the supporting foot directly in line with the diameter being used.

Occasionally a man will primarily use waist flexion preparatory to moving across the circle, neglecting right leg flexion approaching the 90° optimal position. Certainly the waist flexion is important, since it actually increases the "working diameter" of the circle—allowing the man and shot to be moving together over a longer distance for a longer time, and therefore attaining a higher rate of acceleration and putting more power behind the

shot at the moment it leaves the fingertips.

However, the leg extension supplies much of the power. Consequently a good deal of attention must be paid to the approximation of the 90° angle for the pushing leg.

Implicit in the controlled explosion is a slow start—losing the balance toward the front of the circle much as an upright runner must fall forward before he can push against the track with his legs, feet, and toes. If the shot-putter starts to push off before his weight has fallen into line, his shot is almost sure to go bobbing across the circle and thus dissipate much of its potential.

Even after the body bulk has fallen in front of the legs (pistons) into the shot's hoped-for line of flight, we still can't hurry the rear leg drive and extension. The putter in a hurry to do this will be like the sprinter who's in such a hurry to get out of the blocks that although he wins the battle to the 5-yd. mark he loses the race.

"THE author set out to write an article mainly to illustrate how we can learn from working with gifted young men. It was intended to be a few informal jottings on the weight events, since he has had two talented weight men for the past two years. As the ideas and words started to fall into place, it soon became apparent that perhaps he had learned more than at first estimated—a very happy discovery. This is a good reason why it's beneficial to sit down at the close of the season and not only go over personnel, but set down the things we think we've learned and what we'll do next year to try to further improve. It was therefore decided to keep the two events separate, with this article devoted to the shot, and the discus to be dealt with in a subsequent article." Rich Hacker, Track Coach, Berkeley (Calif.) High School.

Most of us will agree that a sprinter is much more likely to push against the starting blocks with too much pressure for a sub-optimal period of time than the reverse—making it a blasting-off rather than a pushing-off process. This may be all right if you're twice as strong as your opponent, but it's not so efficient or effective if you're evenly matched.

This is also true in the shot, which is very much like the sprinter start in concept of intent. So, if the propelling leg has been flexed to the optimal weight-lifter's (mover's) angle of approximately 90°, it can be driven against the earth with increasing pressure and result in controlled acceleration of the body and shot.

There's certainly a great temptation

to get to the front of the circle "ahead of yourself." But the putter shouldn't yield to it. Just like the short-sighted sprinter, he's liable to win the speed battle but lose the distance war.

We must also constantly watch the length of the first "step." It's likely to be too short if we haven't pushed off long enough. The landing (perhaps we should call it the *touching*) position should be about a third of the way across and in identically the same position as just prior to the start of the drive.

Certainly the longer we wait before starting the initial drive, and the longer we continue that drive toward a full leg extension, the more ideal will be the position of the weight and shot as we come down the home stretch and the lower we can stay on the trip across the circle. This low position (as in sprinting) will help increase the acceleration and make it easier to achieve the flight angle necessary for maximum "floating" of the shot.

To be able to utilize the power and acceleration developed thus far, we need proper placement of the left or leading foot. This should be pointed slightly forward somewhere close to the diameter path the driving foot is following, in order to act as the fulcrum over which to rock(et) our body and shot in order to change the direction of its movement, much as the take-off foot does in the B. J. and H. J.

The lead or fulcrum leg can be more than a passive part of our put if it's flexed on contact to make possible some extension and lift.

Logically and practically, the longer we can keep (1) the lead elbow pulling up, (2) the chest extended and pulling up, (3) the head up, and (4) the pusher arm pushing up, the closer we'll come to our potential.

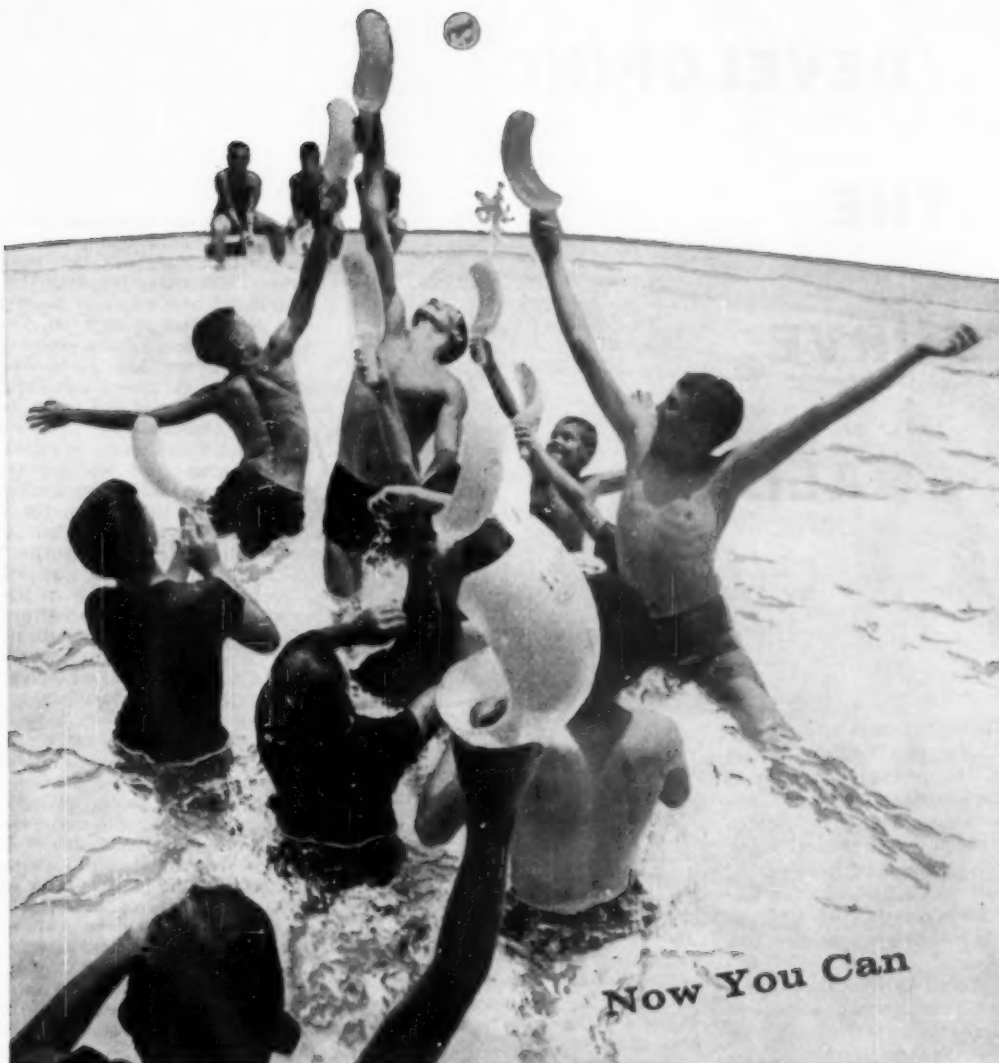
Also (and this has both mechanical and psychological benefit), even though the right elbow is pointed away from the body as the slide across the circle begins, you can help the final push by bringing the elbow in close to the body as the lead leg (foot) hits the ground.

This seems to keep the arm movement directly over the circle diameter being used and under the shot. This "straight-arm" action assures a straight-line follow-through rather than a roundhouse glancing blow action. The mechanical advantage of the above is certainly apparent and important.

Baggett has the most pliable hand I've ever seen on a strong man. His fingers can be hyper-extended to form an angle of 90° with the back of his hand! This presents quite a problem for him in that if his explosion reaches a climax too early, while the shot has pushed his fingers to full flexion, the action (hand moving forward faster than the shot) just forces the fingers farther back (ouch!).

When the final stages of wrist, hand, and finger action flow smoothly to their climax with perfect timing, this ability to hyper-extend the fingers is a valuable asset, allowing for even

(Concluded on page 61)



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DEVELOPING

THE

CURVE

BALL

By LEW WATTS

Former Pitcher, St. Louis Browns Organization

AT THE high school and college level, the fast ball is almost invariably the primary weapon at the pitcher's command. Few kids can throw that good curve which lends so much more effectiveness to the pitching arsenal. How come? Because all too little time is devoted to proper study of and instruction in developing an effective curve.

Yet it's a well-proven fact that a curve ball can be learned, improved upon, and perfected by almost any pitcher with average physical equipment. Its mastery depends on aptitude, wrist flexibility, arm suppleness, and the pitcher's determination.

However, a first-rate curve rarely comes easily. It must be practiced assiduously until it can be thrown with a consistently sharp break and with the degree of control that will enable the pitcher to "move it around" as well as he can his fast ball.

Accepting the validity of the above statements, an attempt will be made to set forth the principles and methods which can be of great assistance in helping any pitcher master the curve.

BASIC THEORY

Theoretically, two basic methods exist by which a pitcher can retire a batter—on a vertical plane and on a horizontal plane. A fast ball which overpowers the hitter or changes of speed which upset his timing are ex-

amples of the latter—which is essentially a method that doesn't necessitate changes in the course of a pitched ball.

The curve is the principal means of retiring the batter on a vertical plane, since it's the one pitch which deviates most radically on said plane.

By way of further contrast, the basis for the curve ball is forward spin, whereas the fast ball derives its "life" and effectiveness from the backspin imparted to it.

Since some theoretical background can prove invaluable to a pitcher in mastering the curve, a few introductory remarks on the scientific aspects of curve-ball pitching are in order at this point.

It's air resistance which makes a curve ball break. This is the reaction of air to any object moving through it at high speed. It will cause a deviation in the course of a ball which is rotating at an exceedingly rapid rate. Quite logically, the ball will break in the direction in which it's spinning. Furthermore, it follows that the faster the rotation, the bigger the curve will be.

To illustrate the importance of air resistance, consider first of all the fact that a curve ball breaks more pronouncedly on a damp day when the air is heavy, and that at high altitudes a curve is little more than a "wrinkle" due to the rarefied atmosphere.

To lend additional emphasis to this premise, consider the fact that, paradoxically enough, a curve-ball pitcher operates more effectively when throwing into the wind. Once again increased air resistance is responsible, here in the form of the better "bite" which a ball gets when going into the wind.

There are, needless to say, several types of curve. The two broadest cate-

gories are the sharp and the sweeping variety. The sweeping one may have a much larger arc but is, in most cases, less deceptive than the sharp-breaking one which is more difficult for the batter to pick up. The sharp curve is given a more elaborate twist in its delivery than the sweeping one.

The specific uses which experienced pitchers make of the curve ball also give it classification; in this respect, varieties which might be called swinging, taking, and wasting types. In other words, when the pitcher wants the batter to hit the ball (or, at least, swing at it), he deals him his best curve and tries to hit a corner with it.

When the batter is least expecting a curve and most likely to take it for a strike, the pitcher can afford to cut the middle of the plate with it, knowing that the element of surprise will often give him a called strike.

Finally, when ahead in the count the pitcher can afford to waste one, and can throw his curve in such a way that it will break outside the strike zone yet have a good possibility of enticing the batter to swing at it.

Before delving into curve ball techniques, one fallacy should be dispelled. The deliveries to which uninitiated fans and players refer as curve, drop, and outdrop are actually one and the same. They're all lumped together under one heading and known merely as a curve ball to experienced players—the drop and the outdrop being curve balls thrown from different angles which will cause them to break down and/or to the side.

For practical purposes, they're called curves, with the possible further qualification of delivery angle—sidearm, overhand, or three-quarters.

DEVELOPING A CURVE

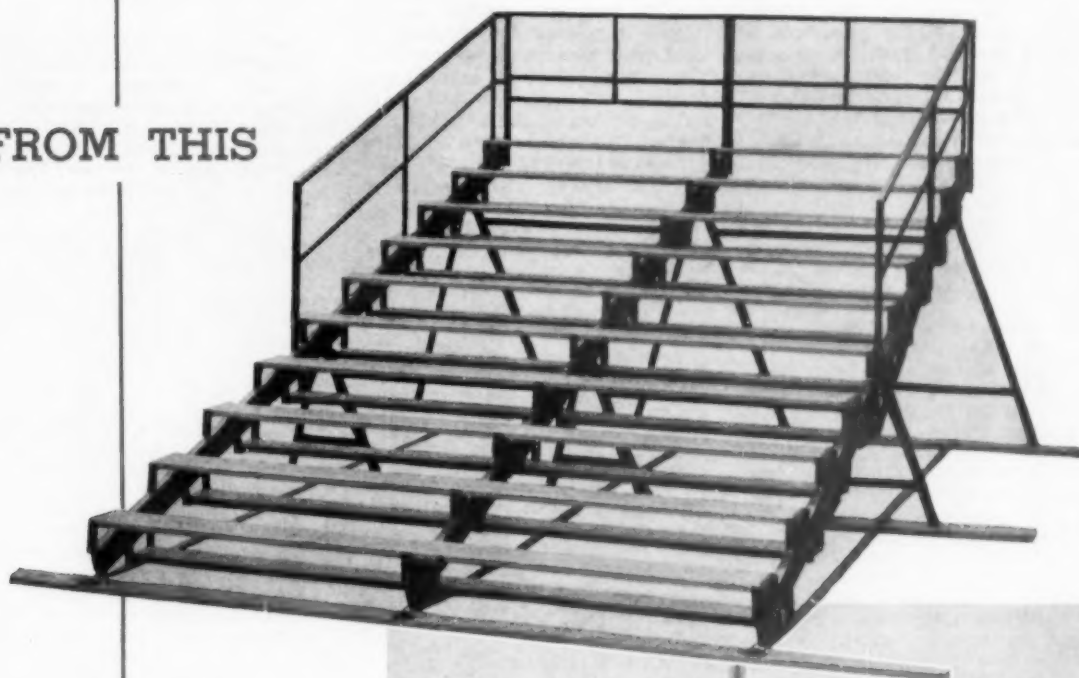
In learning to throw a curve ball, a pitcher should attack the problem in stages, working from gradually increasing distances until he reaches the full 60' 6". To set an arbitrary figure, he should start at 30', spinning the ball with a full curve-ball motion. The next step should be to repeat the process at 45', then the regulation pitching distance can be used.

The idea behind this method is to develop that curve-ball motion which will impart maximum spin to the ball. The pitcher should strive for a delivery in which his elbow straightens with a definite snap movement and an inward rotation of the wrist which will find the back of his hand facing the catcher as the ball is released.

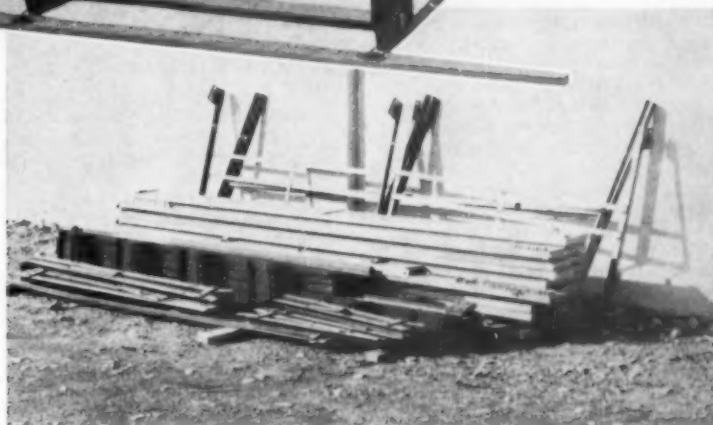
He should go through this procedure with the idea of trying to see how fast he can spin the ball. This, of

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course, is the key to a really good curve ball. As a matter of fact, scientific research has proven that, in order to achieve the most effective "break", the ball should rotate at a rate of 1800 revolutions per minute.

Several essentials of the curve are similar to those required for the fast ball. A strong push-off on the pivot foot is a primary requisite. The shoulder should be behind the throw as much as possible. The follow-through is especially important in bringing the ball down to a point where it will be most effective—there's no such thing as a good, high curve (the ball "hangs").

A right-hander's arm should be below or alongside his left knee upon completion of his motion, while, quite naturally, the left arm and right knee apply in the case of a left-hander. The achievement of this finish-of-the-motion is even more important in the case of the curve ball than of the other pitches.

Any grip which produces maximum spin can be used, but it's preferable to employ the same one with which the fast ball is held. To make for more fluid wrist action, the ball shouldn't be gripped as tightly as for the fast ball. The seams should be made to work for the pitcher, since their action can give the ball greater rotation and can induce a sharper break.

Thus, the grip should be such that as much of the seamed surface as possible is rotating in the direction in which the ball should curve. Good curve-ballers make four seams—the maximum number which can be brought into play—work for them when throwing this pitch.

Most of the pressure should be applied with the middle finger, as this is the one which does the major part of the work. The ball rolls off the index finger as it's released, and the part played by this particular digit is to serve as a guide for the pitch.

The wrist should be bent for the curve ball but not until the pitcher is well into his motion. Bending the wrist as the ball is gripped is too good a tip-off to the hitter. No matter how good the curve, deception is still a highly important element in its effectiveness. It should be added that the more the wrist is bent, the bigger and slower the curve will be.

By way of confirmation of some of these ideas, the words of Sal Maglie can be cited. Probably the finest of modern-day curve-ball artists, Maglie states that he uses the same grip for all of his deliveries, adjusting the finger pressure for the change from one to the other. His grip for the fast ball is similar in finger position but tighter than the one he uses for his curve.

The proper stride for the curve is several inches shorter than that of a fast ball. This is very important. Use of the shorter stride produces a lower point of release for the ball and a better follow-through, both of which help to impart greater spin.

In order to take full advantage of his wrist-snap, the pitcher should try

to release the ball in front of his forehead. And, to repeat for emphasis, his arm should be alongside of his knee on the follow-through.

In practice, the curve ball, as a separate delivery, shouldn't begin to materialize at the very start of the motion. The pitch actually begins to take shape when the arm reaches a position behind the ear. At this point, where the arm starts its forward motion, the forearm and wrist should be turned in toward the shoulder and head until muscular tension is felt.

This brings the wrist and hand into position to release the ball with a rolling motion, off the first and second fingers. The hand is given an outside-in twist as the wrist-snap takes place.

The act of snapping the wrist should occur when the hand comes into a position where it's even with the body in its full sweep. The curve ball will be completely ineffective if the snap takes place any sooner, since the ball must be released in front of the head to achieve a good break.

Conversely, too late a snap will cause a delayed release which will result in a low pitch and insufficient snap which will fail to impart the necessary spin.

Consequently, the curve-ball motion must be practiced diligently until the wrist-snap and release are performed at a point which will produce a sharp break and allow for good control. Experimentation and practice are musts until good results and the proper "feel" are achieved.

METHODS OF RELEASE

There are two methods of releasing the curve ball—off the ends of the fingers or off the inside of the index finger (the side toward the thumb). Either manner of release can be used, although the latter is favored by most pitchers, probably because it entails a more natural motion and permits the ball to be controlled with less concentrated effort. If, however, the more natural side-of-the-fingers release produces insufficient spin, the other method should be tried.

The end-of-the-fingers release requires a fuller wrist-roll, as the palm must be brought into a position which will find it directly facing the pitcher. This technique will impart better spin to the ball because the wrist has a greater latitude of movement up and down than it has from side-to-side.

Needless to say, some experimentation may be required until the method is arrived at which produces good results and is easily mastered. If, however, a pitcher can throw a good curve ball using one of these styles, he should be satisfied with it and not try a change to the other method on the possible chance that it will help his curve. It might well do just the opposite, and cause impairment of his original method in the process.

To recapitulate: Throwing the curve ball entails (1) the extension (straightening) of the elbow, (2) a slightly

inward rotation of the wrist so that on release the palm is facing the pitcher and the back of the hand is toward the catcher, (3) a good snap which takes place as the arm comes even with the body, and (4) a relatively short stride which makes for a full follow-through and helps impart maximum spin.

PERFECTING THE CURVE

Let's assume that the principles of the curve ball are understood and that the basic techniques of throwing it have been properly observed. While this should result in at least a better-than-average curve for most pitchers, such isn't always the case. The action of the pitched ball is the consideration here, not its tactical use.

When a curve ball is delivered correctly but still fails to respond with a sharp break, additional means may be needed. That's the concern of this particular section and it's hoped that an idea may be gleaned therefrom which will enable a mediocre curve-ball pitcher to break off a really good curve.

Since the secret of a good curve is the imparting of a maximum amount of spin, an exceptionally good wrist-snap is required. An exercise which may prove invaluable in abetting wrist action is to snap the wrist with a curve-ball rotation while holding the elbow stationary. A few minutes a day spent in this fashion (without a ball) should contribute greatly to the development of a really strong wrist-snap.

In many cases the pitcher with a poor curve ball contributes to his shortcoming by waiting too long to snap his wrist. This delay makes for weak wrist action and means that insufficient spin will be imparted to the ball.

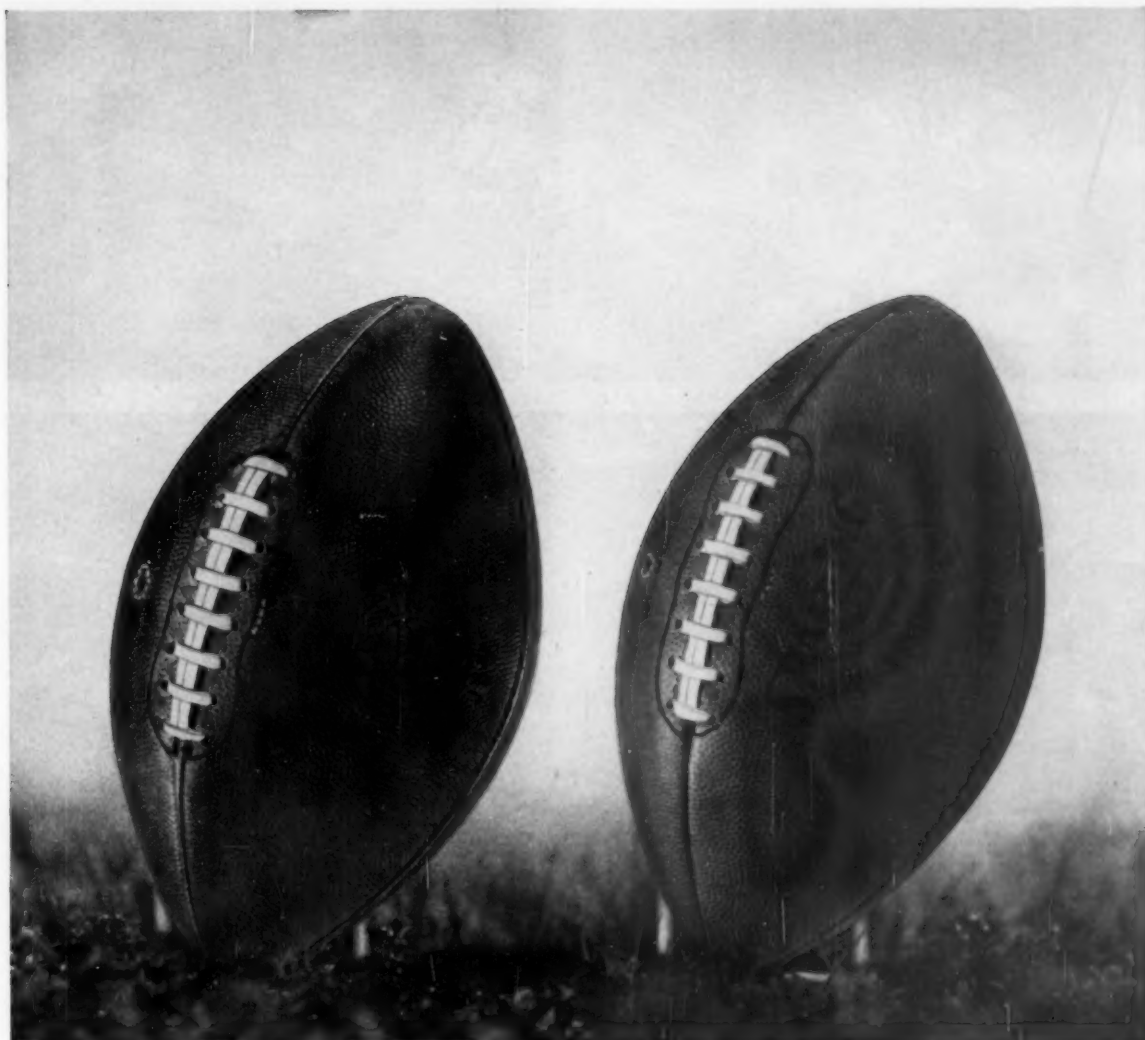
Another fault which hinders the wrist-snap and which, consequently, must be guarded against, is attempting to throw the curve ball too hard. This causes a stiff wrist. You must remember that in order to break off a good curve, the wrist must be relaxed and its motion fluid. The curve simply cannot be hurled as fast as the fast ball and no attempt should be made to do so.

The curve ball shouldn't be "pushed." A pitcher should visualize the correct wrist-action as being similar to "pounding a nail into the wall." This fluid-type motion furnishes the fast rotation which is so essential.

Another "must" for a curve-ball pitcher is to strive for a full sweep of the arm. In this respect, the elbow should be kept away from the body so that the entire arm will enter into the delivery.

The thumb can be brought into play to give valuable assistance in producing spin. If not done so noticeably as to tip off the pitch, the thumb can be tucked slightly under the ball. A quick flip of it as the ball is released will then help impart just that much more

(Continued on page 58)



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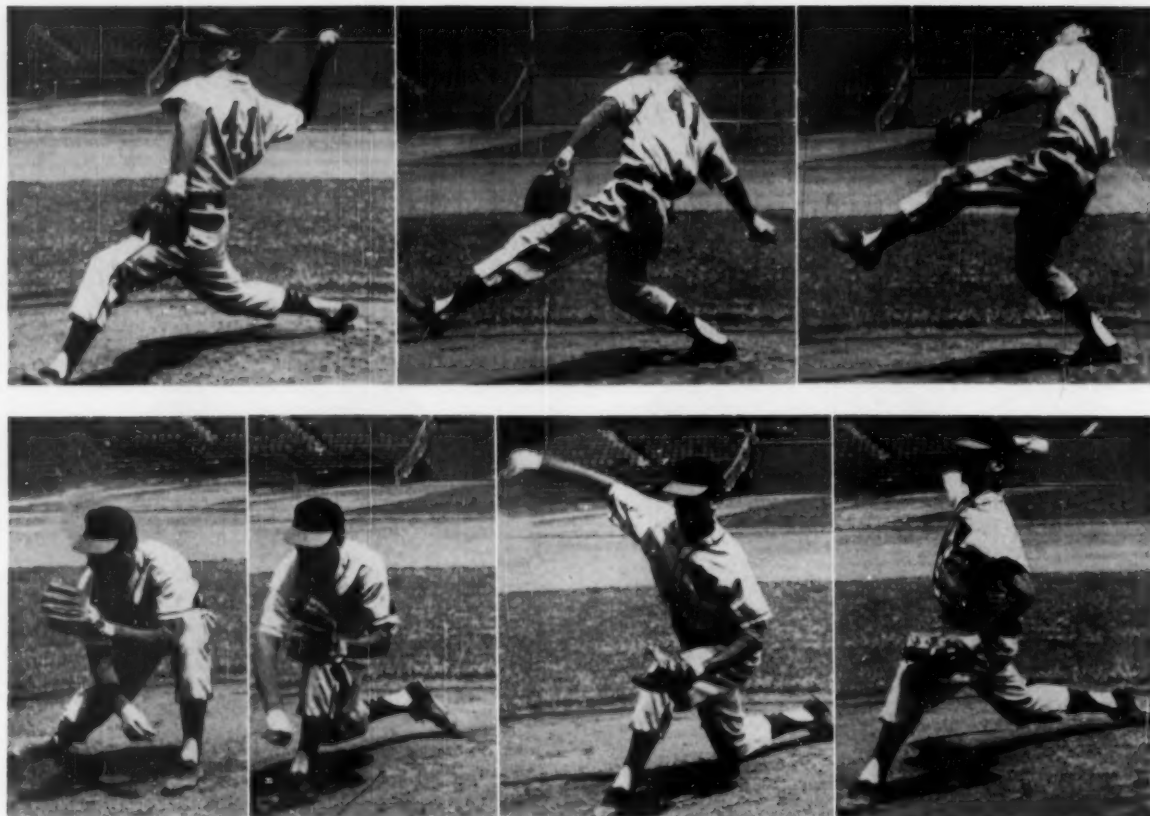
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Pitching's 10 Commandments

spelled out by

BILLY PIERCE

BILLY PIERCE of the Chicago White Sox, the winningest southpaw pitcher in the American League, has been mowing down the hitters, from the explosive Mickey Mantles on down to the powderpuff swingers, with spectacular success for the last 12 years.

What is the secret? Is there a "retirement plan" that could be applied by anybody?

"Definitely not," says the amiable 32-year-old veteran, who entered

the 1960 season with a total of 165 victories. "There's no set pattern that can be used on all hitters, nor is there one that can be constantly repeated on the same hitter.

"A number of circumstances govern the situation. For one thing your fastball may be your best pitch one day and your curveball may be working best on another.

"Another consideration is the game situation. You might want the batter to hit a sinking pitch or a

curveball because there are men on and you're looking for a double-play.

"Basically, however, I'd say that my objective is to make him swing at the pitch he can't hit or the one he isn't looking for.

"When the batter comes to the plate, I know in my mind what pitch I want him to hit and also where I want to pitch to him—low, high, inside or outside. But you just can't pitch the same way all the time, because the good hitters are just as busy trying to analyze your style as you are trying to figure out their weaknesses.

"For instance, a batter comes up in the first inning and I throw him a fastball that he takes. Then I give him a slider and he grounds out to the third baseman.

"Now the next time he comes up, especially if it's in a jam, he'll probably figure that I'll try to get him out again on the slider. This time he won't get it.

"Sometimes you may get a bat-

By **EDGAR MUNZEL**, Sports Dept., The Chicago Sun-Times

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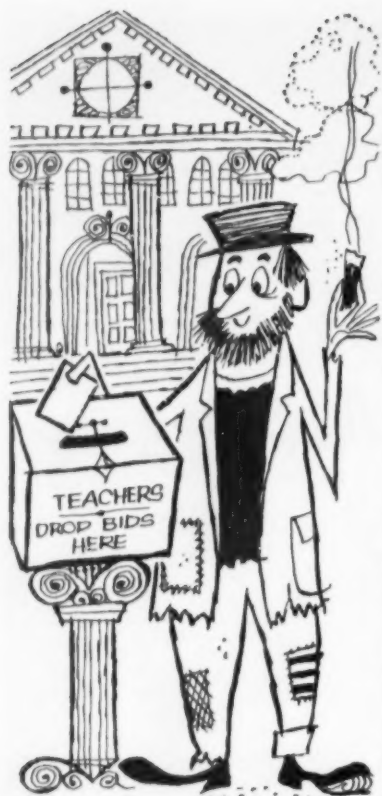
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ter out by pitching to his strength. But if you try it your success will be based on the fact he isn't looking for it."

Pierce's repertoire includes a fastball, curveball and slider and he throws changeups off each pitch. But of all the pitches he believes the fastball, under normal circumstances, still is the best in the clutch. And that's the pitch he believes every youngster aspiring to be a pitcher should work on first.

Pierce's advice to youngsters is threefold: stick to the fastball, practice control and throw overhanded.

"I don't believe any boy should start throwing curveballs until he's around 15 years old," avers Billy. "He should confine himself to the fastball and stay away from everything else. You can always teach the other pitches later."

"A fastball is something you can't acquire when you reach maturity. It must be developed early. If the boy finds he just can't throw hard, then he might as well shift to some other position."

"Overhanded is the ideal delivery because it's easiest on the arm, easiest to control and the easiest from which to throw a good curveball. Sidearm pitchers usually throw only sweeping curves. Furthermore, they (lefty pitchers) have trouble getting right-handers out."

"When you reach high school age, the basic thing still is control and that includes the curveball, which you then should begin throwing."

"As you progress you also can start trying changeup pitches, taking a little off the fastball or the curve. This mixing of speeds must be done with the same motion. If the deception is good, it will throw the batter off in his timing."

In a general discussion of the art of pitching, Pierce listed the following ten commandments that should be observed:

1. Learn the proper stance on the mound. Be comfortable out there, because relaxation is essential to effectiveness.

2. With nobody on base use a pumping windup to help your rhythm.

3. Use your glove to cover up your pitches so that you don't tip off what you're throwing.

4. Be smooth. Don't force your delivery. You'll find the more you strain, the less you'll get on the ball and the faster you'll tire.

5. Get your body down into the pitch with a good follow-through. Otherwise you'll be releasing the ball too soon and you'll be wild high.

6. Watch your stride. The toe of

your foot should be pointing straight at the plate and the delivery should be open. If you're a right hander, the left foot should be slightly to the left of a line toward the plate.

7. Be ready to field your position at the finish of the delivery. If you're a right-hander, bring that right foot up even with the left foot so that you're almost in the position of an infielder.

8. Learn a good move to first base so that you can hold a man on. A stolen base might beat you in a close game.

9. Stay calm and don't rush.

10. Think . . . think . . . think. There must be a thought behind every pitch.

"The stride probably is wrong with more pitchers than any other part of the delivery," warns Pierce. "It even has to be corrected at times with pitchers who get as far as the major leagues. The important thing is not to lock yourself by throwing across your body."

"If you come down with your striding foot across the front of your body, you're tying yourself up. You'll cut down on the possible speed of your fastball and make it almost impossible to throw a curve."

"Length of the stride also is vital. If you stride too long, you may be wild high, because your body can't get down. Normally the stride for a fastball is slightly longer than for a curve, because for a curve you have to come down more."

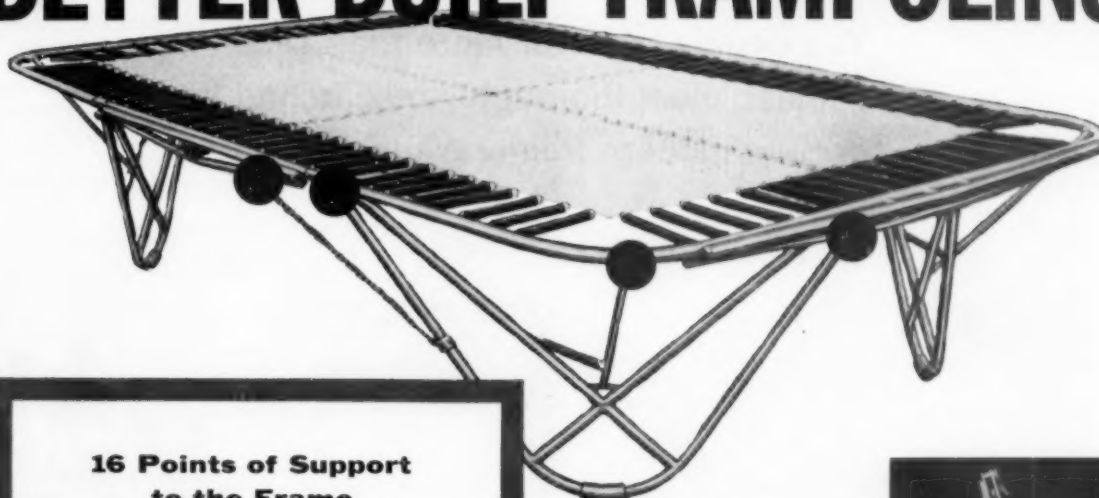
"Pitching actually is a tremendous strain on the legs. They have to do even more work than the pitching arm. Therefore, getting your legs strong is the most important thing in developing condition to pitch."

"Strong legs keep the body working in rhythm. Once your legs tire, it throws the whole body out of timing and coordination. When the legs begin to waver, the upper part of the body tries to do all the work. As a result the upper body comes through before it's supposed to and everything is thrown out of kilter."

"A pitcher can help improve his fielding by playing in a lot of pepper games. Many a game is lost because the pitcher failed to field his position. And he also can help himself a lot at the plate."

"Even though hitting isn't a pitcher's main function, he shouldn't be an automatic out. He should capitalize on every opportunity for batting practice and, above all, he should learn to bunt. A sacrifice that moves a runner into scoring position can often spell the difference between victory and defeat."

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Competitive Season Conditioning

Coaches should peg the in-season work for their distance and middle-distance men almost exclusively upon their strength, mental attitude, and school demands

AMONG all the phases of training for track and field there are many conflicting and amazingly different programs that seem to produce effective results.

Nowhere is this difference more noticeable than in recommended schedules for the athlete who has seemingly reached his peak and who's in the midst of or near the end of his competitive season. We find this especially evident in the conditioning of distance runners.

A look at some of the training schedules of leading distance runners reveals the common practice to change to a sort of "tapering off" program quite different in type and in intensity from that which has been followed in pre-season and early season conditioning.

Some of our best runners lean toward concentration upon light speed work over lesser distances than they've been using for basic training for their event. The tendency to shift workouts to repetitions of 100 yards or 220 yards rather than 440's or 880's is quite widespread.

As the season draws to a close and the championship meets approach, many distance men tend toward almost exclusive concentration on a series of very fast, short sprints, some even making these 50-yard all-out sprints rather than 100's or 220's.

Further search reveals advocates of quite the opposite procedure. Some very successful distance men and their coaches urge the continuance of the regular training without any serious alterations either during or at the end of the competitive season.

Still another group will contend that if the athlete has conditioned himself properly in a well-regulated program aimed at specific goals, he need do little or no strenuous work during the competitive season. They insist that the races in which the man competes will provide all of the work

he needs. Some seem to differ in their opinion of just how long this extremely light schedule should be followed.

The curious part of all of this would seem to be that many of these athletes have followed these widely diverging routes to highly successful performances. With this fact in mind, we coaches can afford to give this phase of our training programs some serious thought.

Perhaps we need to ask ourselves just why we're having our distance runners follow the late-season training programs we advocate. We may well ask ourselves whether this program is really accomplishing what we expect it to accomplish. Indeed, we also want to ask ourselves whether a different schedule wouldn't do the job better.

Any coach who read the story of Herb Elliot which ran in one of our widely circulated sports weeklies must have been interested in the great miler's comment that while he works on an amazingly difficult pre-season schedule, he takes things easy during his racing season.

My first reaction to this was a feeling of curiosity about whether his "taking things easy" might not constitute a mighty tough workout for most runners.

On second thought, however, I felt that there was something more revealing in the comment. Whether or not his easy workout would be considered severe by most standards, it seems evident that Elliot considered it in the light of an easing off from the preparatory schedule that he follows. Obviously, it didn't indicate a stress upon repetitions of sprint work.

At a track and field clinic conducted late in August in Toronto I was interested in Franz Stampfl's comments about the results of some of Chris Chataway's workouts. Stampfl remarked that when Chataway dur-

ing one of his recent successful campaigns changed his workouts from basic 440's to a stress on repetitions of 220's he found that his times fell off sharply instead of improving.

This might seem significant, but before you decide that I'm about to advocate an unchanging program for in-season and out-of-season workouts, I want to point out some interesting contrasts.

One of America's finest college milers told me confidentially not long ago that after following a prescribed program of interval training for several months and getting into the best condition of his career, he found himself utterly unable to continue the same schedule during the racing season.

His efforts to do this actually left him running miles about 10 seconds slower than the times of his first couple of races. He insisted that he found it impossible to continue an unaltered schedule after his competitive season had started.

Speaking somewhat in the same vein, another great American distance runner remarked to me that during the racing season when he followed his regular training schedule and then ran a very good time trial at three quarters of his distance about the middle of the week, he was invariably disappointed in his time for the competitive effort on Saturday. Here again is an indication that the well-conditioned runner was unable to turn in two top efforts in a single week.

Even more recently I heard the coach of a young fellow who had just run under world's record time for the three miles comment that his runner had just completed a week's preparation that consisted of hardly more than jogging repeatedly over the college's cross-country course.

With all these facts in mind and some of my own results with runners on the high school level, I'm forced to the conclusion that we need to consider training during the competitive season upon a strictly individual basis. If the widely varying programs of so many fine runners prove anything it's that we're foolish to accept any in-season training program as the answer to all of our troubles with distance men.

Further evidence that we should begin to question the wisdom of some of our widely accepted ideas of late-

By W. HAROLD O'CONNOR, Coach, Concord (Mass.) High School

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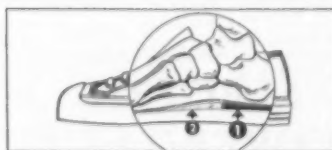
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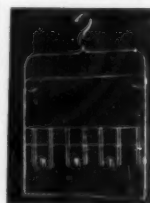
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season conditioning and preparation for major races was offered to Eastern track coaches during the 1958-59 indoor season. It can be seen in the amazing results of Charlie Jenkins' sudden decision to compete in the major indoor meets.

The fact is that Jenkins put in less than two weeks of intense training before entering the 600 at the Boston Garden and finishing second only to Ed Collymore in a field packed with middle-distance stars.

What's even more revealing was Jenkins' time of 1:11 for the distance. Here was a man returning to racing after a lay-off of weeks, doing no important preparation until about 10 days before his competition against some of the best in the world. A further study of Charlie's races for the rest of the season showed that even in the races he won he didn't show any appreciable improvement in time over his first race.

It seems to me that Jenkins gave evidence that he had kept in good all-around condition even though not racing and not even preparing for the indoor season. What interests me, though, is the fact that he could so quickly bring himself into excellent racing form.

Jenkins claimed that his intensive preparation was based upon repetitions of 440's and some 220's and then a 660-time trial of 1:21. He asserted that the 660 indicated that he was in far better condition than most people dreamed.

I can recall hearing some highly respected college coaches remark that Charlie would be well out of the running. That they proved wrong doesn't lead me to question their coaching ability but rather to question the theories some of us may still have about training schedules to be followed once the runner is in good general condition.

I've a feeling that many a runner who might attempt what Jenkins did would find himself hopelessly out of contention at the end of a quarter mile in a middle-distance race in such company. Perhaps Charlie could have benefitted from some sustained speed work, but he certainly showed no lack of endurance.

I find myself returning more and more to the belief that Charlie lacked nothing but the intense desire to win that he had during the Olympic year.

This interesting development along with the attitude of many of our best distance runners has convinced me that we need to peg the work of our distance and middle distance men almost exclusively upon their individual strength, mental attitude, and their daily job or school demands.

Bunting Offense

(Continued from page 14)

sible instant before committing himself.

As the pitch comes in, the batter executes a half pivot on both feet. He doesn't square around to face the pitcher as in the sacrifice bunt. His top hand slides up the handle of the bat six to eight inches and he grips the bat lightly.

The direction of the bunt is determined by the top hand and arm. To drag the bunt down the base line, the top arm begins to straighten and it pushes the bat to the desired angle. To push the bunt down the opposite base line, the top arm remains bent and both arms push the bat in the desired angle.

Many successful bunts are made down the third-base line, but the greatest possibility of success is down the first-base line. There are two reasons why a bunt to the right side will be more successful:

First, a faster start away from the plate will be obtained as the direction of the bunt is toward first base.

Secondly, there may be hesitation on the part of the pitcher and first baseman as to who will field the ball and who will cover first. If the first baseman fields the ball, then the pitcher must cover first and the possibilities of error exist in the rush of the defensive play.

FAKE BUNT-AND-HIT

In order to keep the defense honest and take advantage of holes in the infield, every bunter should know how to hit out of the bunt position. In faking a bunt and hitting away, the batter assumes the sacrifice position.

As the ball is delivered, the bunter slides his top hand back down the handle of the bat and draws the upper part of his body back into hitting position. He then punches at the ball with a half swing, attempting to drive the ball on the ground past the charging first or third baseman, through the hole vacated by either the short-stop or second baseman, or to hit a pop fly behind third base.

Successful completion of this play will cause the defense to move in more cautiously in a bunt situation. This caution will give the bunter and base runner more opportunity to successfully execute a sacrifice or bunt-and-run play.

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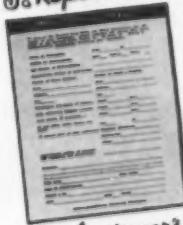
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COACHES' CORNER



Please send all contributions to this column to Scholastic Coach, Coaches' Corner Dept., 33 West 42 St., New York 36, N. Y.

THE near-sighted pro coach was rapidly losing his temper at his first skull session. "You at the back of the room," he roared, "what's the left tackle's assignment on the fullback counter up the middle?"

"I don't know."

"Well, then, can you tell me what the right end does on the halfback run-pass option?"

"I don't know."

"I taught that only yesterday," the coach bellowed. "What were you doing at the time?"

"I was out drinking beer with some friends."

The coach turned purple. "You have the audacity to stand there and tell me that! How do you expect to make the team?"

"Hell, Coach, I don't. I'm an electrician and I just came in here to fix the lights."

The basketball coach was called for jury duty. He begged to be excused on the grounds that he couldn't afford to be away from his team. The judge scoffed, "I suppose you're one of those people who think the world couldn't go 'round without them."

"No, your Honor," replied the coach. "I know very well my team can get along without me. But I can't afford to let them find it out."

An American student was explaining the game of football to a foreign exchange student. "There are two ends, two tackles, two guards, a center, one fullback, two halfbacks, and 75,001 quarterbacks."

"75,001 quarterbacks?" queried the foreigner in astonishment.

"Yeah," explained the American, "one on the field and 75,000 up in the stands."

Indiana's football coach, Phil Dickens, couldn't help but be impressed by a glowing letter from an ex-Hoosier

star extolling a high school prospect.

"He's lean and mean," the letter ran, "and in the summer he hunts rattlesnakes for 50¢ a pound."

Forest Evashewski's housekeeper at Iowa is devoutly religious. After a Rose Bowl victory, Hawkeye fans presented Ev with a new car. He drove it home, pulled up in front of his house, and strolled to the front porch.

"What do you think?" Ev asked the housekeeper.

The good woman appraised him silently, then said, "Just remember, the same people who praised Jesus also crucified him."

Bob Hope claims he played football in school. "I was known as Neckline Hope. I was always plunging down the middle, but never really showing anything."

The football coach was explaining how he sprang the upset of the season with a team averaging 105 pounds. "My line wasn't big enough to open holes for my big backs to run through. So I figured if we're opening teenie-weenie holes why not use teenie-weenie backs to run through those teenie-weenie holes? So I substituted my 4 by 6's, and it worked. We scored three tds without a back over 6 inches wide and 4 inches thick. I measured 'em. It was a perfect fit."

Passing thoughts on the humbling game of golf:

Golf is a lot of walking, broken up by disappointment and bad arithmetic.

A golfer is a guy who can walk several miles toting 100 pounds of equipment, but who has Junior bring him an ash tray.

Golf is like taxes; you drive hard to make the green and then wind up in the hole.

To put is to place a thing where you want it. To putt is a vain attempt to do the same thing.

The business tycoon was advising his son's tutor, "There's no sense in teach-

ing the boy to count over 100. He can hire accountants to do his bookkeeping."

"You're right, sir," retorted the tutor. "But he'll want to play his own game of golf, won't he?"

The wife of the famous distance runner had broken her stopwatch and had trouble preparing his breakfast. "Ron," she finally called in exasperation, "there's only one way I can time your egg—run out and do the mile."

Though Roger Council, Southern Illinois U.'s outstanding all-around athlete, was considered too heavy for most of his specialties—diving, trampolining, tumbling, and pole vaulting—he did more than all right, never losing a diving event in 26 dual meets.

"Actually," he remarked, "my only talent is for going up and coming down."

Coaches are now doing quite well financially. There's Coach Earnest Hope, for instance. He started poor at the age of 20 and retired 20 years later with a comfortable fortune of \$50,000. He accumulated it through effort, economy, dauntless courage, superlative coaching, and the death of an uncle who left him \$49,000.

The little community of Walton, Neb., was thrown into a happy tizzy when Mac Pomerantz, famed football coach of Mideastern U., agreed to be guest speaker at the local high school annual banquet. But, alas, Coach Pomerantz reneged at the last moment—leaving the banquet sponsors without a name attraction.

Here's how the local press headlined the five momentous days leading up to the banquet.

First day: "Mac Pomerantz, great coach of Mideastern U., will be guest speaker at the Walton High banquet."

Second day: "Fabulous Coach Pomerantz will reveal the secrets of his coaching success."

Third day: "Mideastern's nationally famous football coach will titillate the audience with his folksy humor."

Fourth day: "Coach Pomerantz, coaching great, has agreed to autograph copies of his famous book, *Secrets of the Double-Winged T*."

Fifth day: "Mac Pomerantz, 64-year-old coach of the team that was slaughtered 44-6 in the Cotton Bowl, has canceled his speaking engagement at Walton High School."

During spring training at West Virginia, a visitor approached Coach Art Lewis and kiddingly observed, "Gaining weight, aren't you, Pappy?"

"Sure am," drawled Pappy, "I want the alumni to have something to chew on this fall."

Before the historic Braves-Dodgers playoff last October, Dan Parker, the crack syndicated sports columnist, threw a delightful fast ball at one of
(Concluded on page 59)

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100-Yd. Dash	9.3	Texas Relays	4/ 6/57
100-Yd. Dash	9.4	Ahlens, Tex.	4/27/57
220-Yd. Dash	20.0	Sanger, Calif.	6/ 9/56
220-Yd. Dash	20.2	Los Angeles	5/ 7/49
440-Yd. Run	46.2	Salt Lake City	6/21/47
440-Yd. Run	46.0	Berkeley, Calif.	6/ 5/46
440-Yd. Run	45.8	Modesto, Calif.	5/26/56
120-Yd. H.H.	13.5	Fresno, Calif.	5/15/50
220-Yd. L.H.	22.2	Durham, N. C.	5/ 5/56
220-Yd. L.H.	22.3	Salt Lake City	6/21/47
400-Meter H.	49.5	Los Angeles	6/29/56
110-Meter H.	13.4	Bakersfield, Calif.	6/22/56
880-Yd. Run	1:46.8	L. A. Relays	5/24/57
2-M. Relay	7:22.7	L. A. Relays	5/24/57
880-Relay	1:22.7	Texas Relays	4/ 4/57
440-Relay	38.9	Kansas Relays	4/20/57
440-Relay	39.9	W. C. Relays	3/11/57
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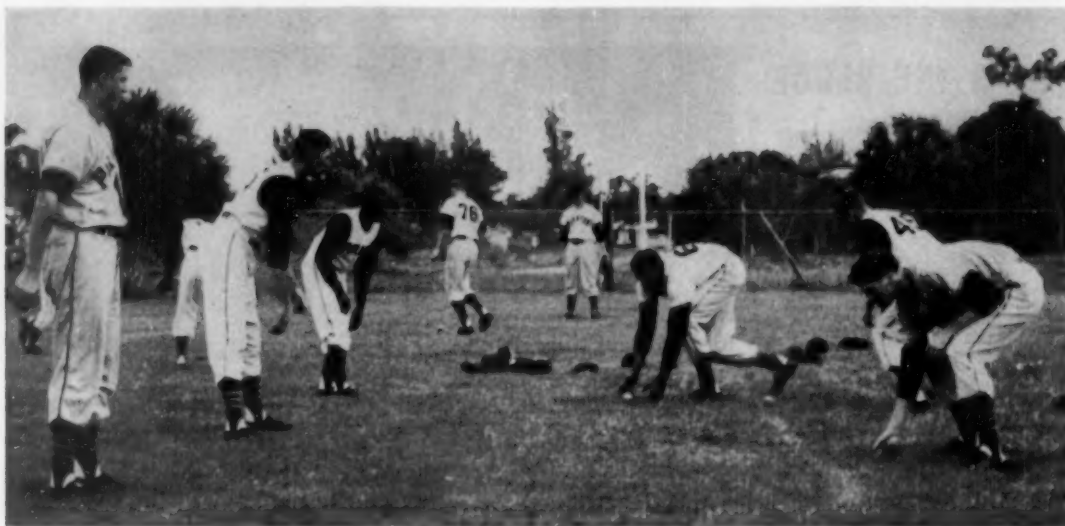
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Coaching High School Baseball

AT HOUSATONIC we start the baseball season in June, about a week after the close of the previous season! A meeting is held of all the players who'll return in the fall, and we make certain that each will play some summer baseball.

Since ours is a baseball-conscious area, this poses no problem. A boy may play in the Babe Ruth League or in a strong circuit composed of experienced players. Each kid is checked during the summer and note is made of his progress and shortcomings.

During the fall, any player not participating in football may come out for our informal baseball program. The emphasis here is on defensive fundamentals and team defense.

Special work is also given to pitchers. In the warm fall weather, after a summer of throwing, there's much less danger of sore arms; and we can work on proper delivery and mastery of pitches while throwing hard. Over the past few years, we've been fortunate enough to carry this program on into November.

In the late winter months, any boy who isn't playing basketball is given the opportunity to continue conditioning through weight-lifting and a fundamentals program. We

want everyone to report to regular practice in good condition.

Late in February, the returning players report to the gym for our indoor program. Since our gym floor space is small, 67' x 40', our practices must be carefully planned. The first few sessions consist mainly of orientation and batting fundamentals. Group batting drills are used in which we instruct the boys as follows regarding the bat, stance, and swing:

1. Choose a bat that feels good. Be sure it isn't too heavy.
2. Use a firm grip.
3. Assume a comfortable stance. We prefer the modified open stance for better batting control.
4. Be sure your stance in the batter's box allows you to reach any pitch in your strike zone.
5. Make certain your eyes, shoulders, and hips are level, and your wrists are cocked.
6. Take a short, well-controlled stride. As you step with your front foot, turn it toward the pitcher. This will open the front hip and help get your body into the swing. Keep your lower arm fairly straight.
7. Slightly flex your knees and keep your weight on the balls of your feet.

Players work in pairs, learning to analyze the swing of their partner

under coaching supervision. They next hit off a batting tee. After the swing is improved, regular batting practice is held in the gym, using an automatic pitching machine. Sponge rubber balls are fed by the machine so that the players may take their regular cuts. Special attention is given to the following points—the foci of schoolboy batting faults:

1. Learn your strike zone, and keep your hands at the top of this zone in your stance. This helps you avoid going after pitches above the strike zone.
2. Keep your eye on the ball; learn to "lock" your head toward the strike zone while swinging.
3. Get your body into your swing to assure full power. The hips must pivot as the stride is taken to bring the body and arms around in full swing.

Practice is split into groups as players are added. Defensive fundamentals are first taught indoors. All boys must learn the basic infielder's stance, with emphasis on the following points:

1. Keep your weight on the balls of your feet, and point your toes toward the batter.
2. Bend your knees and your back to bring your rump down close to the ground.
3. Carry your glove low and out in front of the body.

Once the defensive stance is mastered, we move the defense out-

By EDWARD M. KIRBY, Housatonic Valley Reg. H. S., Falls Village, Conn.

side. Since the ground is usually covered with snow, we use a black-top parking lot that has been cleared of snow. Here, using all-weather rubber baseballs, the beginnings of our outfield and infield units are developed.

While these practices are extremely valuable, the work of paramount importance is the development of pitchers. Pitching is the backbone of any team, from Little League to the majors, and we choose our pitchers carefully. Naturally, we like big boys who can throw hard. But merely throwing hard isn't enough. We must develop hard workers with good pitching actions and strong competitive spirit.

The pitchers start early and throw often, so that they'll be ready to pitch regularly once we get outdoors. Special instruction is given in conditioning and care of the arm, holding the ball, control, and throwing the fast ball, curve, and change of pace. Our pitchers must learn to throw the curve so it breaks down, thereby increasing the chances of the ball being hit on the ground.

We consider the development of pitchers as the *number one* part of our baseball instruction, though the catchers are also made an integral part of this instruction.

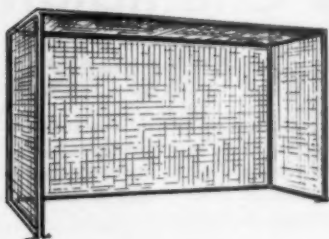
As our indoor program progresses, the pitchers begin throwing "live" bunting practice to the batters. This (1) enables the pitchers to throw to hitters, (2) gives the batter a chance to get his eye on the curve ball, and (3) helps develop our bunting attack—a most important part of our game.

We also cover, among other things: leading off base, stealing, recovery drills, quick-hands drills, and reaction drills. All these have the emphasis on speed.

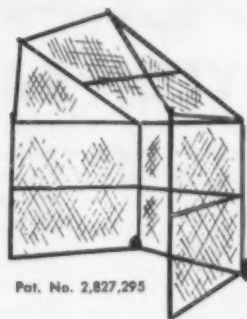
After the squad has been chosen, our baseball handbook is distributed for study. This manual, compiled by the coach and revised every year, presents the basic ideas and ideals of our baseball program. About two hours a week, in the early season, are spent on chalk-talks, going over the details in the handbook.

Generally, the manual is set up as follows:

1. An introduction aimed basically at building a winning attitude. This consists of a letter from the captain, synopsis of former Housatonic players in professional baseball, and a discussion of prospects for the coming season. Players are reminded of the privileges they enjoy in participating in the great game of baseball, and what's expected of them when they don the Housatonic uniform.



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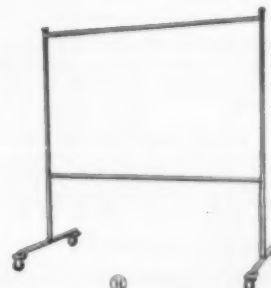
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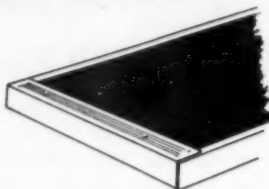
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4. Offense covering instructions on batting, bunting, sacrifice plays, base-running, sliding, base coaching, bench conduct, and philosophy of team offense.

5. Defense covering instruction on fundamentals, stance, throwing, and catching the ball. Details are given on the playing of each position. Also covered on defense are: pick-off plays, relays, fielding bunts, defending the double steal, warming up between innings, playing the sun, and philosophy of team defense.

6. Outline sheets filled in by each player, under coach's instruction, covering all relay and bunt situations.

This handbook is a functional part of our program, and the players like it. Periodic checks are made to make sure all players know their job.

When weather permits, we move to our regular diamond. We continue working on fundamentals, but the emphasis now shifts to team offense and defense. The pitching machine is used on one end of the field for special work.

After instruction on sliding, we hold offensive situation practice in which the team practices the sacrifice, squeeze, push and drag bunt, run and bunt, and slash hit from the sacrifice in the bunt situation. This gives the pitchers work, as well as defense for the "B" squad.

Considerable time is spent on situation defense. Here the complete defense is set up, including the pitcher and base runners from the "B" squad. The coach, using a fungo bat, sets up all the situations likely to be encountered in a game.

We also use this early season time to develop the philosophy set up in the handbook. A few of the major points on offense and defense follow:

Philosophy of Offense:

1. Concentration on meeting the ball when at bat. Build up a low strikeout rate. Force the defense to handle the ball. (Over the past few seasons, we've averaged only 3.8 strikeouts per game.)

2. Aggressive, alert base-running. Take the chance when the percentage is in our favor.

3. Play for the lead run early in the game.

4. A strong bunting attack is necessary to supplement our hitting.

5. Hustle hard to keep pressure on our opponent. Make them throw the ball and force them to make mistakes.

Philosophy of Defense:

1. Always play for a shut-out. The opponent cannot beat us without runs.

2. We like the outfield to play shallow and be able to go back quickly on long hits. This will cut off "bloop" hits.

3. We want the middle of the infield to play deep, with the corner men fairly shallow and close to the line.

4. Don't allow anyone to bunt on us.

5. Cut off the front runner whenever possible.

6. No unnecessary throws. All throws must have a purpose. Never throw unless there's a put-out or set-up possibility.

7. Hard work by pitchers who can keep the ball low and field their position.

8. If our defense is solid, we'll win. Our opponents' mistakes will mean the difference.

This philosophy, while not entirely sound for professional teams, is extremely well geared for high school baseball. The boys take pride in their team abilities in offense and defense.

SINCE 1947, Housatonic Valley High in Falls Village, Conn., has won 154 games and lost 29 for an .842 percentage. Over the past four years, they've gone to the state finals three times and the semi-finals once. What's more, they've captured six of their last seven league championships and have had three of their pitchers signed to professional bonus contracts. Coach Edward M. Kirby, after three years as assistant, became head coach in 1955.

One of our most helpful analyses in helping players carry out their assignments efficiently is our charting system. We, of course, keep batting averages and the other usual materials, but we also use the following charts:

Pitcher's Pre-Game Chart:

This chart is filled out by the starting pitcher and catcher of the day, while watching the opposing team take batting practice. Listed for each opposing player is his stance, hitting characteristics, and how we'll pitch to him.

The information is hung in the dugout on a clipboard and used during the game. This chart is also used when scouting an opponent, along with our regular scouting sheet.

(Continued on page 62)

The first new development in sideline protection in years!!

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MADE WITH HORCOHYDE: The revolutionary material that gives extra protection, lasts longer, keeps players really warm and dry.

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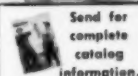


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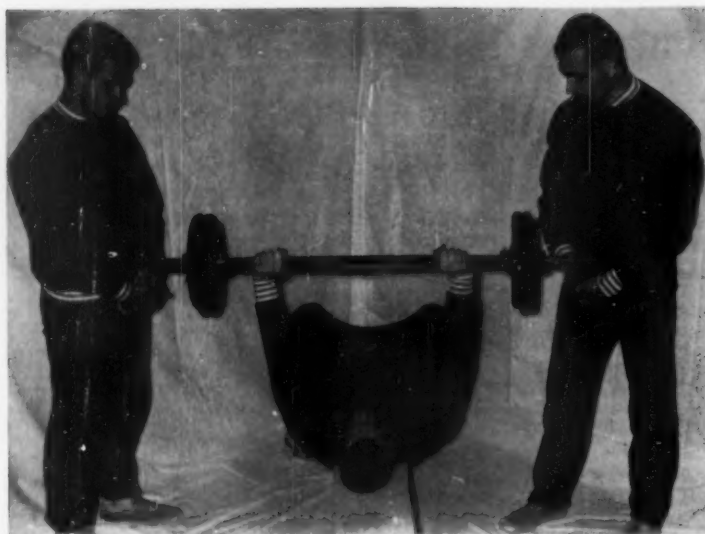
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By **BILL MORGAN**

*Asst. Coach, Kimball Union Academy
Meriden, New Hampshire*

Weight Training for the Weight Events

COACHES, athletes, and spectators alike have observed that the stronger athlete usually performs better in the weight events. If this be the case, why not develop strength to its maximum potential?

This is exactly what we attempt to do at Kimball Union Academy. The writer contends that the distance a missile can be projected is directly proportional to the strength of a specific individual.

Quite often the terms *weight training* and *weight lifting* are confused, and more often they're used interchangeably.

Weight training refers to a series of exercises performed with weights in the form of barbells or dumbbells.

Weight lifting, on the other hand, deals with competition held under prescribed rules to determine who can lift the most weight in a prescribed lift.

The writer advocates a weight training program which emphasizes total body development. The weight events are concerned with the upper body for the most part, but it would be ridiculous to de-

velop the superior aspect of the transverse plane and neglect its foundation.

Vigorous weight training should be initiated at least six weeks before the season begins. This will permit an actual increase in strength to take place. Strength gains can be measured by compar-

ing the initial weight lifted for a specific exercise to the final weight lifted or, more scientifically, with a cable tensiometer or some form of dynamometer.

The first few days of pre-season weight training should entail evaluation of each individual's strength. When the strength index of each athlete has been determined, the athletes should be divided into groups of three on the basis of similar strength indices.

The writer has found that a group of three is optimum. First of all, a certain amount of intragroup competition is developed. Secondly, two of the athletes can serve as spotters on such exercises as squats, toe raises, and bench presses. Thirdly, a rest period is afforded following the execution of each exercise which permits the inactive athletes to recuperate and observe the performer.

The writer recommends the following exercises for pre-season training: (1) standing two-hand press; (2) biceps curl; (3) bent rowing; (4) lateral lifts; (5) upright rowing; (6) sit-ups; (7) bench press; (8) reverse curls; (9) toe raises; and (10) squats.

A program utilizing these exercises will result in total body development. Squats, toe raises, and sit-ups should have 15 repetitions as an aim. When 15 repetitions can



be executed with a given weight, five pounds should be added. The athlete should work toward five repetitions with the remaining exercises and add five pounds when needed.

This should be a six-day-a-week program and is of special value to schools which cannot get outside until late in the spring.

Research has indicated that two types of programs produce the best results. One is to work out every other day; or every day with light workouts on the off days. We use a six-day-a-week program which works as follows: Monday—two sets; Tuesday—one set; Wednesday—two sets; Thursday—one set; Friday—two sets; Saturday—one set; and Sunday—rest.

REGULAR SEASON TRAINING

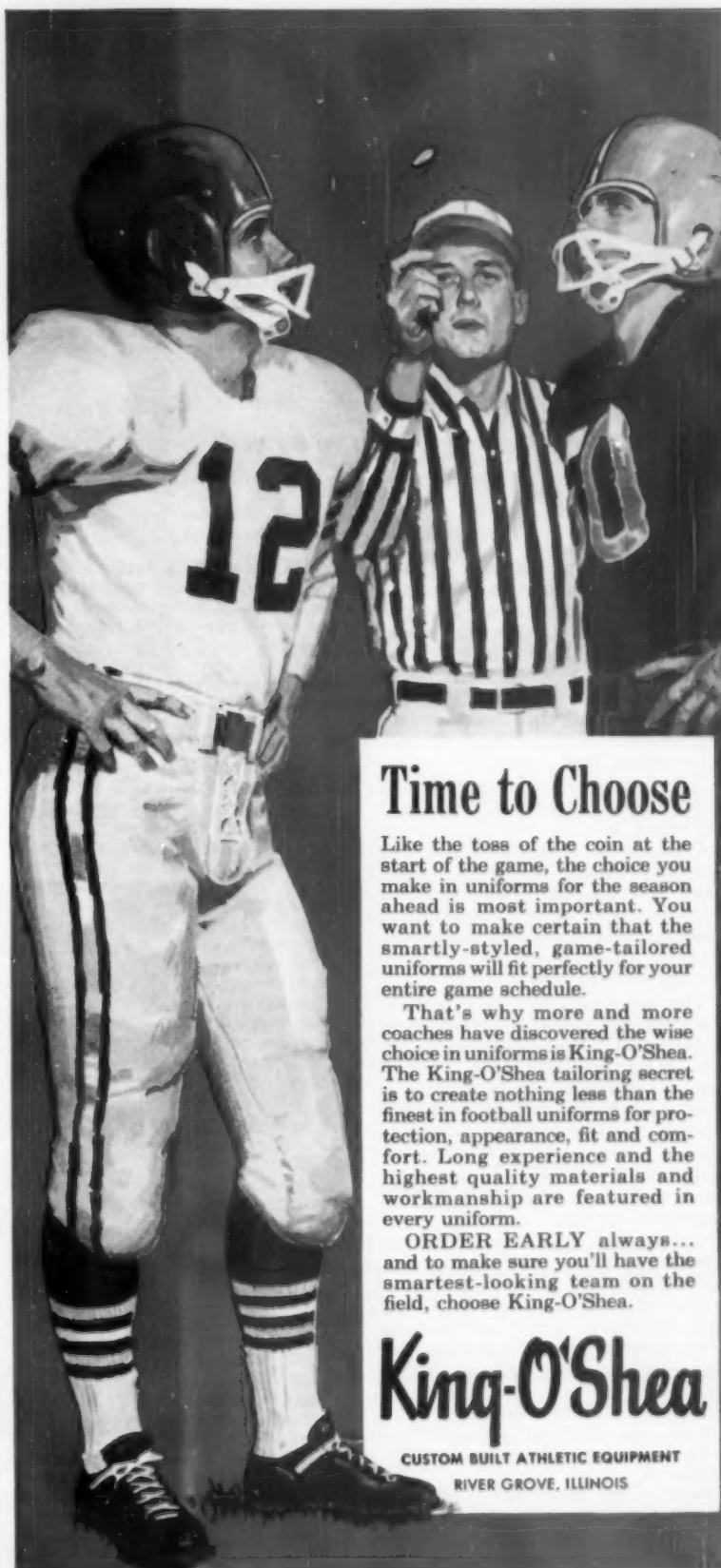
In order for muscle strength to be retained, it must be overloaded with progressive resistive exercises. Consequently, the strength developed during pre-season training won't be retained simply by putting the shot or throwing the discus. Since practice of a specific event cannot be sacrificed for weight training, the pre-season program must be modified.

We use two systems at Kimball Union Academy. If a boy lacks the needed skill in projecting the various missiles, we take him off weight training for the duration of the season. If a boy possesses adequate skill, we put him on a modified weight training program.

First of all, during the regular season the number of exercises, exercise days, and sets should be cut down. Once the opening meet is only three weeks off, we use weight training on Monday, Wednesday, and Friday, and only perform one set each day. The number of exercises is limited to four per day and varies according to the athletes' special events.

If, for example, there are six weight men on the program, they can be broken up into Groups A and B with three in each. On Monday, Group A begins practice by weight training and Group B with the weight events. On Tuesday, the opposite occurs and this alternation continues throughout the week.

We've found that weight training periods will average about one hour at the beginning of the training period. However, as the opening meet approaches the athletes have usually mastered the various exercises and techniques. As a result of the modified program being in action, we spend about 20 minutes per day on weight training.



Time to Choose

Like the toss of the coin at the start of the game, the choice you make in uniforms for the season ahead is most important. You want to make certain that the smartly-styled, game-tailored uniforms will fit perfectly for your entire game schedule.

That's why more and more coaches have discovered the wise choice in uniforms is King-O'Shea. The King-O'Shea tailoring secret is to create nothing less than the finest in football uniforms for protection, appearance, fit and comfort. Long experience and the highest quality materials and workmanship are featured in every uniform.

ORDER EARLY always... and to make sure you'll have the smartest-looking team on the field, choose King-O'Shea.

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CUSTOM BUILT ATHLETIC EQUIPMENT
RIVER GROVE, ILLINOIS

Championship Swimming and Diving Coaching Methods

The state championship coaches answer a variety of questions dealing with rules, training, diving, facilities, organization

EVERY swimming coach can benefit enormously from studying the methods used by championship coaches. In the past we've learned about these methods through hurried conversations with boys attending summer AAU swimming meets and by asking alumni attending colleges in other areas to visit outstanding high schools.

In this way we've managed to discover a little about several outstanding teams, but not nearly enough to give us a real understanding of any specific program. In order to obtain more complete information we compiled a questionnaire containing 195 questions in seven categories—coach, school, rules, meets, natatorium, diving, and training programs.

The questionnaires were sent to the coaches of all the 1958 state championship schools (33), to the coaches of those schools that had at least two All-American ratings in 1958, and to several other coaches who've had outstanding teams in previous years. Returns were received from 20 state championship teams and 17 other schools with All-American ratings.

Thanks to the generosity of those coaches, we've learned of the methods and different approaches used to build great teams. Many wrote out each answer in detail but, because of the lack of space, we've shortened the answers into brief summaries.

COACH

Age range—25 to 59; median, 36.

Years coaching swimming—2 to 34; median, 9.

How many other sports do you coach? No other sport, 11; one other

sport, 21; two others, 7; three others, 1.

What are you paid to coach swimming? \$100 to \$650; median, \$400. 9 receive no pay and 9 others didn't answer.

What are your assistants paid? 14 schools have from 1 to 4 assistants; pay range, \$240 to \$300.

SCHOOL

Is your athletic program self-supporting? Yes 18, No 22.

If not, how is it financed? Board of education, 13; student body, 7.

Are you on a budget in swimming? Yes 23, No 16.

If so, what is your season budget? \$225 to \$3000; median, \$500.

How many state championships has your school won in swimming? 0 to 15; median, 1.

Number of state championships in all sports? 0 to 40; median, 3.

How many All-American swimmers have been produced by your school? 0 to 100; median, 2.

GENERAL

How many years has swimming been held in your school? 1 to 60; median, 11.

How many boys are on your squad? 12 to 132; median, 40.

Number of swimmers? 10 to 120; median, 35.

Number of divers? 0 to 12; median, 5.

Do they try out for the team? Yes, 29, No 11.

Approximately how many try out for the team per year? 20 to 400; median, 70.

What tests do you use? Time trials, 18 (time all strokes—2, choice of two strokes—1); self-elimination, 4; form, 6; willingness to work, 3; endurance, 3; general ability tests, 2; attitude, 3; scholarship, 2; training habits, 2; kicking ability, 2; attendance, 1; keep all

sophomores and juniors—seniors must go under 1:06 (100 fs) or comparable time in other strokes, 1; keep a ratio of 10 sophomores, 8 juniors, 6 seniors, 1.

Do you use a special form for recording workouts? Yes 10, No 30. Meets? Yes 33, No 7.

Do you cut squad? Yes 19, No 21.

If so, when? After tryouts, 3; after 1 week, 1; after 2 weeks, 8; after 3 weeks, 1; after 4 weeks, 2; after 6 weeks, 2; before first meet, 1; halfway through season, 1; last 5 weeks of season, 1; week prior to league meet, 1; week prior to state meet, 1.

What's your ratio of freshmen, sophomores, juniors, seniors? Freshmen 0 to 45; median, 10. Sophomores, 0 to 35; median, 11. Juniors, 3 to 30; median, 10. Seniors, 1 to 25; median, 8.

Are your boys given some sort of a brochure of season summaries? Yes 6, No 34.

How many coaches handle swimming and diving? One, 28; two, 8; three, 1; four, 3; five, 1.

Do you share your pool with girls, phys ed? Yes 23; No 17.

If so, what is your arrangement during the competitive season?

Boys have pool to themselves during competitive season, 28.

Girls have pool for a part of one night, 8.

Girls have pool for one hour twice a week, 3.

Both boys and girls train at same time, 1.

Girls have pool 4 of 5 nights for one hour, 1.

Does your school have interscholastic competitive swimming for girls? Yes 7, No 23.

Is there much school interest in competitive swimming? Yes 36, No 4.

Are you a member of a league in swimming? Yes 30, No 10.

If so, how many times do you meet each opponent in league competition? Once, 20; twice, 10.

Do you have a league meet? Yes 30, No 10.

RULES

Do you believe the no-touch rule in the freestyle is a good rule? Yes 27, No 13.

Would you favor a four-stroke individual medley instead of the present three-stroke race? Yes 22, No 18.

Would you favor making the 400 freestyle a required event for dual competition? Yes 19, No 21.

List any rules changes you believe would be beneficial to interscholastic competition:

Follow uniform rules in FINA, AAU, NCAA, and interscholastic on such items as starts, touch, and stroke.

Adopt intercollegiate order of events.

Add 1500 meters to championship events.

By BOB TIMMONS, Coach, Wichita (Kan.) High School East



**"SALCOLAN*
KEEPS MY MEN
IN THE GAME"**

*Reports Bobby Brown,
Athletic Trainer for
Houston Public Schools.*

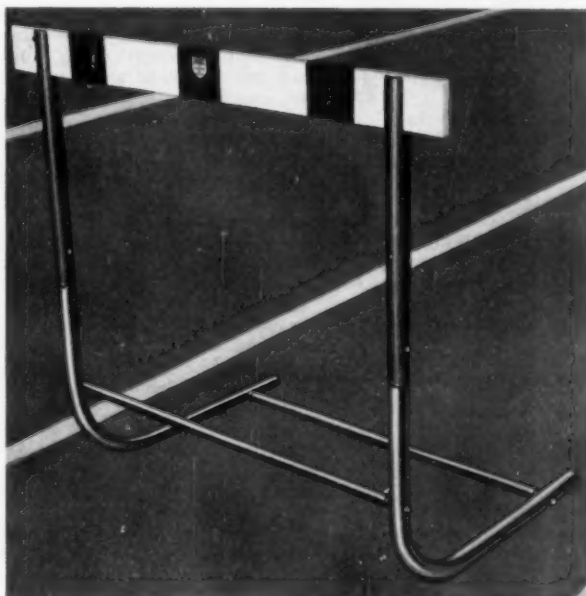
"It's my responsibility to keep our players in competing condition and SALCOLAN helps me do just that," says professional trainer Bobby Brown. "This non-toxic medication gives my men complete protection for abrasions, lacerations, blisters, burns."

You, too, will find that nothing relieves pain like SALCOLAN. No other product promotes healing as fast, or protects so completely from infection. Write today for illustrative brochure. Address your card to:

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BOX 145

• WYNNEWOOD, PENNA.



Eliminate individual medley. Use Olympic events only.

400 yard relays instead of 200 yard. Drop underwater clause on breaststroke.

Require dolphin kick in butterfly. Adopt intercollegiate rule on disqualified swimmer having to complete event after three false starts.

Permit swimmers to participate in two open events and one relay.

If referee doesn't fire gun on jump, he should have a definite command to release swimmers left on the blocks.

Require five judges in every diving competition (duals included). In Kansas duals, guest team furnishes 3 boys to judge and host team furnishes 2. Boys on teams see more diving than most outsiders and therefore are more qualified than most adults. Three judges from guest school assure visiting divers of a fair break.

Leave the rules alone.

MEETS

Is there a limit on the number of meets you're allowed? Yes 14, No 26. If so, how many? 7 to 17 meets; median, 12.

How many varsity meets do you have during the season? 6 to 18; median, 13.

"B" team meets? 11 schools have none. Range 1 to 18; median, 7.

Sophomore meets? 27 schools have none. Range 5 to 18; median, 7.

On what days do you try to hold meets? Monday, 4; Tuesday, 5; Wednesday, 10; Thursday, 6; Friday, 19; Saturday, 15.

Do you charge admissions for meets? Yes 19, No 21.

If so, what are the charges? Students—25¢, 5; 30¢, 1; 35¢, 3; 50¢, 8; 75¢, 2; Adults—25¢, 3; 50¢, 9; 60¢, 1; \$1, 1.

How many of your meets are duals? 3 to 21; median, 11. Triangular? 22 schools have none; range 1 to 7; median, 2. Quadrangular? 37 schools have none; range 1 to 3; median, 2. Invitational? 18 schools participate in none; range 1 to 3; median, 2.

Do you have any relay meets? Yes 21, No 19.

Do you swim the 400 in dual competition? Yes 16, No 23.

What's the average attendance at your meets? 20 to 2000; median, 150.

What do you require in the way of warm-up prior to meet competition? Individual approach, 13; turns, 12; calisthenics (stretching), 3; starts, 6; sprints, 6 (75 yds. to 150 yds. total); kicking, 1.

Warm-up (distance)—50 yards to 1 mile; median, 400 yards.

Warm-up (time)—5 min. to 30 min.; median, 15 min.

Do you have tryouts for each meet? Yes 17, No 23.

Approximately how many high school swimming teams in your state? 7 to 300; median, 39.

STATE MEET

Do you have a state meet? Yes 27 states.

Do you have a regional or district meet to qualify for the state meet? Yes 15, No 25.

Date of state meet? November 22 to

May 1; median, March 1.

How many schools compete in the meet? 7 to 70; median, 19.

Is it a two-day meet? Yes 23, No 12.

When do you hold the 400 freestyle? First event, 13; Friday evening, 8; after last preliminary, 1.

Do you have any restrictive rules for boys who swim the 400? Yes 4, No 26, not held 5.

If so, what are they? Time qualifications—5:00, 2 states; 5:10, 1 state.

When do you hold diving preliminaries? Friday evening, 8 states; between preliminaries and finals, 7; Friday afternoon, 4; Saturday morning, 4; first day, 2; two days before finals, 2; first day, first event (finals only), 1.

Do you follow rules book as to order of events in preliminaries? Yes 31, No 4.

If not, what is the order? Diving last, 2 states; medley relay first event, 1; 100 freestyle and 100 breaststroke interchanged, 1.

How many qualify for the finals in your state meet? 6 lanes, 32 schools; 5 lanes, 2; 1 lane, 1.

What method is used for seeding boys in heats and lanes? Rules book, 17 states; submit best times on entry blanks, 16; draw lanes, 8; heat leaders as to ability, 4.

Is this done by the coaches just prior to the meet? Yes 8, No 28. Or is it done by the meet director? Yes 26, No 9.

NATATORIUM

Indoor pool, 30; outdoor pool, 8; no pool of own, 1; combination indoor-outdoor pool, 1.

Size of pool? Width range—18' to 60'; median, 30'. Length range—60' to 33½ meters; median, 75'.

Average width of space around pool? 3' to 30'; median, 8' (indoor).

Number of low boards? One, 30; two, 8; three, 1; four, 1.

High boards? None, 24; one, 15; two, 1.

Number of lanes? 4 to 10; median, 6.

Do you use lane ropes for dual meets? Yes 33, No 7.

Seating capacity? 50 to 2000; median, 400.

Do you have a record board in the natatorium? Yes 23, No 15. Bulletin board? Yes 28, No 9. Meet scoreboard? Yes 24, No 14.

DIVING

Do you have a diving coach? Yes 8, No 31.

How many divers do you have? 1 to 12; median, 5.

Do divers work out at same time as swimmers? Yes 34, No 6.

How much time to divers work out per day? 30 min. to 3 hours; median, 1½ hours.

Do you use loop films? Yes 27, No 13. Are divers required to swim as well as dive? Yes 11, No 29.

Do you work trampoline? Yes 17, No 23.

If so, during or prior to season? Prior, 12; during, 4; both, 6.

What type of boards do you have? Buckboard, 13; aluminum (other than

buckboard), 13; fiber glass, 10; wooden, 4.

Do you use five judges in dual meets? Yes 4, No 36 (Refer to section on Rules Changes for Kansas plan.)

What phases of diving do you work out on most? Approach, 15; fundamentals, 11; execution, 9; take-off, 5; required dives, 5; entry, 3; height, 2; hurdle, 2; preparation of dives for state meet, 1; body control, 1; safety, 1; confidence, 1; degree of difficulty, 1; foot entry, 1.

TRAINING

Do boys start practice during school time (i.e. last hour of day)? Yes 13, No 27.

How long is practice per day? 1 hour to 4 hours; median, 2 hours.

How many days per week? 2 days to 6 days; median, 5.

Do you have morning practice? Yes 8, No 32. Sunday practice? Yes 5, No 35.

How many weeks does season last? 10 to 28; median, 15.

Opening: September to March; median, Nov. 6.

Ending: November to June, median, March 1.

How many weeks training do you have prior to your first meet? 2 to 10; median, 4.

Do boys take calisthenics? Yes 32, No 8. Prior to season? Yes 29, No 11. During season? Yes 28, No 12. Prior to day's practice? Yes 22, No 16. During practice? Yes 9, No 31. After practice? Yes 4, No 36.

Do you have a weight-training program? Yes 22, No 18.

If so, when? Pre-season, 11; during, 3; before practice, 3; post season, 3; summer, 2.

What do you do? Special weight work; Light weights three times a week (not required); three times per week and alternate with water practice; exercises described in Weight Training in Athletics by Karpovich; develop shoulder and chest; one hour per day—eleven set exercises, increase in sets, repetitions, and weight; build for specific power; repetitive series; specific exercises mentioned—presses, curls, deep knee bends, running, rope skipping, 20-pound sand bags, exercises similar to strokes, calisthenics.

How many months per year do your swimmers train? 3 to 12; median, 6.

Do you have a summer program? Yes 20, No 20.

Do you have boys go out for other sports in off-season? Yes 36, No 3.

Do you work boys on a group basis? Yes 37, No 3. Individual basis? Yes 33, No 7. Both? Yes 27, No 13.

Do you post results of practice efforts? Yes 27, No 12.

Is your training basically overdistance or underdistance? Overdistance, 19; underdistance, 2; both, 18.

Do you have every boy attempt to master each stroke? Yes 22, No 17. Or do you have each boy specialize in one stroke and stay with that specialty in practice and in meets? Yes 26, No 14.

Training techniques used: Overdistance: Yes 38, No 2. Underdistance: Yes 31, No 9. Pacing: Watch—Yes 36, No 4. Ma-

chine—Yes 3, No 37.

No breathing: Yes 20, No 20.

Repeat interval: Specific time—Yes 25, No 15. Specific interval—Yes 31, No 9.

Regressives (400, 200, 100, 50, etc.): Yes 20, No 20.

Progressives (50, 100, 200, 400, etc.): Yes 20, No 20.

Regressive-progressive: Yes 12, No 28.

Progressive-regressive: Yes 18, No 22.

Relays: All strokes—Yes 34, No 6. Handicap—Yes 15, No 25.

Kicking drill: Along walls—Yes 14, No 26. Kick boards—Yes 38, No 2.

Pulling drills: Float logs—Yes 30, No 8. Tie ankles—Yes 18, No 22.

List any other techniques:

Continuous circle swimming—back, pull, swim (all strokes).

Breathing every third stroke.

One lap sprints—full stroke or legs alone.

Time turns and widths with emphasis on turn speed.

Constantly alter work out to create interest.

Time everything—list best times in all distances.

Bicycle tube pulleys and harness connected to wall (time interval).

Pursuit relays, forced swim, tread water, pulling second swimmer who holds legs.

Cross pool push off sprints—for conditioning and turns practice.

Water games to break monotony: ping-pong polo, water polo, kick board relays, tug of war.

One arm sprints.

Stress push-off on time.

Swim in tennis shoes.

Bobbing drills.

Individual medley relay sprints.

Half to $\frac{3}{4}$ speed on first half of specific distance, then all out rest of distance.

Underwater window used to study arms, legs, breathing, and turns.

What do you do during the last week or two prior to the state meet?

Short sprints, 14; turns, 10; relay take-offs, 7; starting, 6; shorten work-out, 6; easy swimming, 6; training only those who will be entered in state, 4; regular work-out, 3; psychological approach, 4; form on stroke, 2.

Others mentioned once: progressive sprints, distance one day and sprints next, overdistance, visit with each boy about his event in state, cut work-out to 2000 yards, extra hard work-out for just those boys qualified for state, specific training in events in which boys have qualified, push off, kicking drills, finishing, progressive-regressive relays, try to avoid fatigue last week, kick 400 yards—pull 400 yards—swim 400 yards, breathing habits, rest, race exact distances and in order—repeat and taper off, select probable entries—give other boys a chance to challenge for places.

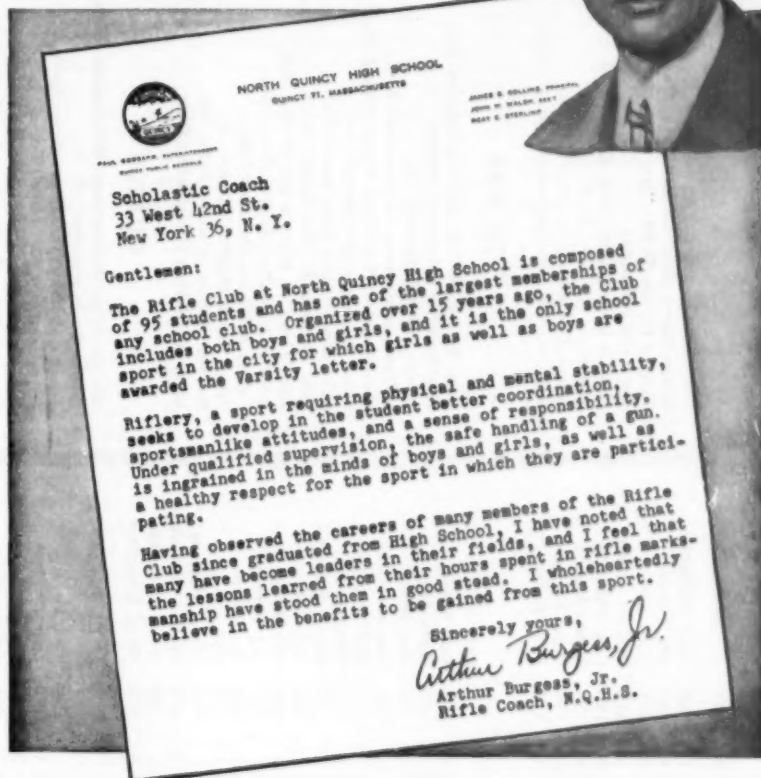
What phases of swimming do you work on most? Form, 18; conditioning, 16, endurance, 7; pulling, 7; distance, 7; turns, 6; kicking, 4; master all strokes, 3; team spirit, 3; sprinting, 3; mental attitude, 2; pace, 2.

(Concluded on page 60)

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1959 All-American High School Football Squad

THE first Vermonter ever to make *Scholastic Coach's* All-American H. S. Football Squad headlines our ninth annual collection of super stars.

He's *Ollie Dunlap*, 205-pound fullback from Bellows Free Academy in St. Albans. In leading his team to a second straight state diadem, Ollie carried the ball over 1,800 yards and scored 203 points in eight games.

And lest chauvinistic Texans, Ohioans, Illini, Californians, and Pennsylvanians—whose representatives have dominated these selections for years—sneer at the Green Mountain boy's prowess, let it be said that this kid was unstoppable come rain, snow, sleet, or the British. The scoop is that Ollie is definitely headed for Syracuse, due to the missionary work of one Jimmy Brown.

Heaviest of the 1959 selections (according to program weights) was 235-pound *Milton Cunningham* of Greenwood, S.C., and lightest at 155 was *Don Caum*.

This year's selections were slightly lighter than those of recent seasons. But 63 of them were over six feet tall and will surely fill out in time for Weeb Ewbank, Jim Lee Howell, et al to consider them for use in 1964.

All in all, 78 stars from 39 states and the District of Columbia are represented on the 1959 Squad. Leading the state parade in selections is Pennsylvania, with seven choices. Next comes Texas with six picks. Then comes New York with five places, California with four, and Georgia, Illinois, New Jersey, South Carolina, Ohio, and West Virginia with three apiece.

Two high schools share individual honors with two selectees each. Wichita Falls (Tex.) placed halfback *Travis Regan* and tackle *Benjie Shields*, while Poly High of Long Beach, Calif., contributed halfback *Willie Brown* and tackle *Mike Giers*.

Particularly outstanding, position-wise, are the quarterbacks. This year's crop surpasses all those of previous years, and that includes such standouts as Earl Morrall, Bart Starr, Ronnie Knox, Raymond Brown, Jim Ninowski, Lee Grosscup, Randy Duncan, George Izo, Charley Milstead, and Harvey White, all of whom went on to All-American college fame.

So good were the signal-callers that only performers with sensational records could be considered.

OUTSTANDING QUARTERBACKS

For example there was *Jerry Rhome* of Dallas Sunset (Tex.) with 95 completions in 170 tosses for 1,633 yards and 19 touchdowns. Rhome also kicked 27 of 29 conversions, passed for 14 of 16 two-point tries (they play college rules in Texas) and rushed for 377 yards.

Tom Bilodeau of Boston Latin, third-ranked school in the nation scholastically, who's a son of a former Harvard great, tossed for 15 tallies and ran three punts back for scores.

Gary Wydman of Corning, N.Y., completed 30 of 49 passes in the frigid snow belt and ran for 1,115 yards in 108 carries.

Don Caum of Central Dauphin (Harrisburg) Pa. is a two-year all-stater.

From the Far West comes *Mel Renfro* of Portland, Ore., who may break the national high hurdles record next spring. Renfro completed 27 of 51 passes for 689 yards and rushed for 809 yards in 76 carries during a nine-game regular season. In three state playoff games, he passed for seven touchdowns.

The South contributes *Jack McCathern* of Columbia, S.C., who, among other accomplishments, kicked two field goals while leading a South Carolina all-star squad to victory against a larger North Carolina team; and *Perry Lee Dunn* of

Natchez, Miss., the boy written up in *Time* recently as the target of a wild recruitment chase. Dunn weighs 206 and accounted for over 2,000 yards total offense in Mississippi's toughest competition.

Jay Wilkinson, son of Bud Wilkinson, also made the team after two years as an all-stater at Norman. A fine all-around athlete, he's also one of Oklahoma's brighter basketball stars.

So good were the quarterbacks that *Cliff Baskerville*, a two-year all-stater in New Jersey, was moved to halfback because he threw only 41 passes all season. He couldn't be left off because he rushed for 916 yards and led his team to a state title in 1958 and a near miss in 1959.

Some of the outstanding feats performed by other backfield members include:

Pat Shows of Ruston, La., who gained 1,750 yards rushing and completed 34 of 61 passes; *Willie Brown* of Long Beach Poly, who netted 1,707 yards; *Rick Leeson* of Scott Twp., Pa., who averaged 230 yards per game; *Bob Secret* of Clarksburg, W. Va., who scored 173 points in 10 games; *Travis Reagan* of Wichita Falls, who scored 29 touchdowns from his wingback position; *Tom Glover* of Henderson, Ky., who tallied 30 touchdowns and averaged over 10 yards per try.

Why so many of our ends fail to compile outstanding pass receiving records is due to the fact they play on teams that stick to the ground. *Jake Adams* of Highland Springs, Va., grabbed 40 tosses for 407 yards, and *Charles Logan* of Chicago's Lane Tech pulled in 39 for 413 yards and played safety on defense. *Matt Snorton* of Detroit Northwestern hauled in 31 tosses for 505 yards. Both Logan and Snorton stand 6-4.

In passing it should be mentioned that two boys who were outstanding juniors in 1958 and were considered sure bets to make this year's team were hampered by injuries.

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Both may be considered outstanding college material.

Anthony Lorick of Los Angeles Fremont was player of the year in his city as a junior. He's broad-jumped 24-6 and was on our All-American track team. The other boy is *Hix Green* of San Antonio Jefferson, a great open-field runner. Both have been awarded honorable mention even though they failed to make all-state.

The outstanding parentage of *Jay Wilkinson* was mentioned before. This year, more than ever before, have sons of famous athletes come to our attention. Leeson, the Scott Twp. fullback, is the son of Al Le-

zouski, who played guard on Pitt's 1937 national champions; and Tom Bilodeau's father was an outstanding football, hockey and baseball player at Harvard.

We're sure the names of the following will bring back memories to sports fans. Most of them made honorable mention, which means they narrowly missed the first squad: *Cliff Melton jr.*, *Claude Callaway jr.*, *Bill Paschal jr.*, *Frank Howard jr.*, *Ted Petoskey jr.*, *Art Guepe jr.*, *Nick Etten jr.*, *Forest Evashevski jr.*, *Andy Pilney jr.*, *Lou DeFilippo jr.*, *Todd Baugh*, and *Vince Lombardi jr.* All of these lads made all-state teams in 1959.

HONORABLE MENTION, 49 STATES

ALABAMA—Jimmy Dill (E) Murphy of Mobile; Reece Carr (E) Lee of Montgomery; Jerry Tucker (T) Gadsden; Ken Mitchell (G) Coffee of Florence; Jim Blair (C) Coffee; Jerry Beard (B) Tuscaloosa; Stanton Lindsay (B) Ramsay of Birmingham; Ben Wood (B) Lee of Montgomery.

ARIZONA—Andy Stoglin (E) Phoenix Union; Dave Areghini (T) Phoenix Central; Dennis Couse (T) Tucson; Eddie Bricker (B) Miami; Eli James (B) Phoenix Union; Jon Chesser (B) Mesa.

ARKANSAS—Jim Grizzle (E) Fort Smith; Billy Waldrup (B) Blytheville; Mike Edwardes (B) Texarkana; Jim Bob Weir (B) Fort Smith.

CALIFORNIA—Ends: Potas Newman, L. A. Fremont; Dave Johnson, Long Beach Wilson; Ken Fraser, Pasadena Muir; Ted Watkins, Modesto; Dave Dougan, Clayton Valley. *Tackles*: John Walker, Reseda; Carl Jones, L. A. Manual Arts; Matthew Baggett, Berkeley; Leigh Callaway, S. F. Lowell. *Guards*: Damon Bame, Glendale; Bruce Johnson, Hawthorne; John Skaggs, Franklin of Stockton; Bob Hector, Tamalpais of Mill Valley. *Centers*: Tom Garner, VanNuys; Mal Weaver, Redlands; Rich Koepfer, Sequoia of Redwood City. *Backs*: Hal Bedsole, Reseda; Bob Berry, Willow Glen of San Jose; Bob Garibaldi, Stagg of Stockton; Ron Calcano, S. F. St. Ignatius; Teruo Yamamoto, Banning of Wilmington; Lonzo Irvin, Long Beach Poly; H. D. Murphy, San Diego; Ken Graham, Santa Monica; Bill Gaydosch, El Monte; Rudy Lucero, Woodland; Jim Sinyard, Enterprise; Jim Blakeney, Hanford; Bob Farris, Alameda; Gary Lewis, S. F. Poly; Anthony Lorick, L. A. Fremont.

COLORADO—Jerry McClurg (E) Grand Junction; Doug Anderson (T) Greeley; Ed McDowell (G) Greeley; Steve Osborn (C) Golden; Jim McKay (B) Greeley; Stringy Ervin (B) Littleton; Ronnie Orrell (B) Denver South.

CONNECTICUT—Roger Milici (E) Hamden; James Mazurek (T) Stamford; Joe Frattaroli (T) Stamford; Bruce Molloy (B) Maloney of Meriden; Dick Niglio (B) Notre Dame of West Haven.

DELAWARE—Tom Harrison (E) Salesianum of Wilmington; Pete Vassos (C) Wilmington; Mark Mulrooney (B) Salesianum.

D. C.—Jimmy Jones (E) Eastern; Dick Dean (C) Eastern; Steve Glaser (B) Wilson.

FLORIDA—Mack Joiner (E) Monticello; John Dent (T) Tampa Chamberlain; George Collins (T) Miami Jackson; Willie Gort (G) Miami Senior; Jim Seaward (B) Jacksonville Lee; Frank Budka (B) Pompano Beach; Jack Medford (B) West Palm Beach; Jim O'Donnell (B) Clearwater.

GEORGIA—Billy Paschal (T) Atlanta Sylvan; Bill Curry (C) College Park. *Backs*: Larry Rakestraw, West Fulton; Johnny Sinclair, Marietta; Mallon Faircloth, Crisp County; Frank James, Avondale; Billy Lotheridge, Gainesville.

HAWAII—Bob Crockett (T) Punahou; Ron Kiyota (T) McKinley; Alvin Yamashiro (B) Iolani.

IDAHO—Joe Blackwell (G) Borah of Boise; Judd Melgaard (T) Idaho Falls; Mush Stevens (B) Boise; Rick Church (B) Burley; Leroy Abe (B) Caldwell.

ILLINOIS—Charles Logan (E) Lane Tech; Phil Wagner (E) Rich Twp.; Doug Schmidt (E) Maine Twp. of Des Plaines; John Seveik (T) Cicero Morton; Jerry Mroczek (T) Lane Tech of Chicago; Chet Keller (C) Urbana. *Backs*: Bill Pfeiffer, Chicago DePaul; Bill Dodd, Virden; Willie Stinson, Danville Schlarman; Bill Smith, Sycamore; Jim Wood, Rock Island Allen; Jim Purnell, Evans-ton; Rich Butkus, Chicago Vocational.

INDIANA—Bruce Smith (E) South Bend Central; Andy Wodjula (T) E. Chicago Roosevelt; Spencer Givens (T) Richmond; Dick Bates (C) Fort

Wayne Central. *Backs:* Kim DeVault, Evansville Memorial; Jim Yoder, Goshen; J. D. Smith, Gary Froebel; Mike Maple, Logansport.

IOWA—Dick Adams (E) Mason City; Terry Peters (E) Glidden; Jim Lemon (G) Winterset. *Backs:* Harold Kennerly, Des Moines Tech; Dean Stoller, Burlington; Dick Dougherty, Mount Pleasant; George Smith, Davenport.

KANSAS—Mike Starbuck (E) Topeka; Junior Miller (E) Atchison; Dave Kerr (G) K. C. Wyandotte; Sam Bruner (G) Shawnee-Mission North; Pat Knolla (C) Wichita Kapaun; Ken Coleman (B) Wichita West.

KENTUCKY—Stew Elliott (E) Morganfield; Jerry Shepherd (E) Louisville Male; Steve Wright (T) Louisville Male; Bob Waddle (G) Somerset; Dick Anderson (B) Owensboro; Sherman Lewis (B) Louisville Manual.

LOUISIANA—Bill Hucklebridge (T) Bossier City; Mickey Cox (T) Neville of Monroe; Jerry Negretto (C) Warren Easton of New Orleans; Al Burguières (B) LaGrange of Lake Charles; Pat Screen (B) New Orleans Jesuit.

MAINE—John Doyle (E) Lewiston; Ardie Kochian (E) Portland; Fran Bedard (B) Stephens of Rumford; Joe DiPietro (B) Deering of Portland.

MARYLAND—Fred Joyce (C) Fort Hill of Cumberland; Jim Ring (C) Mt. St. Joseph of Baltimore; Cliff Melton (B) Baltimore City; Ed Stuckrath (B) Baltimore Poly; Bob Gaffney (B) Allegany of Cumberland.

MASSACHUSETTS—John Brophy (E) Brockton; Bob Fabri (T) Beverly; Sam Slick (T) Westfield; Walt Dobrzelecki (G) Salem; Ed Costello (C) Boston Latin; Walter Shanks (B) Brockton; Ken Palm (B) Melrose; Art Roberts (B) Holyoke.

MICHIGAN—Doug Bickle (E) Traverse City; Tom Kresnak (T) Muskegon Catholic; Charles Brown (G) Pontiac Central; Ron Zurek (C) Grand Rapids Catholic; Randy Egloff (B) Plymouth; Ron Bishop (B) Royal Oak Shrine; Bob Rubick (B) Manistique; Rich Waite (B) Midland.

MINNESOTA—Mike Daley (T) Lewiston; Dougal McClellan (B) St. Paul Harding; Dan Neppel (B) East Grand Forks Sacred Heart.

MISSISSIPPI—Mike Morgan (E) Natchez; Clement Dellinger (E) Notre Dame of Biloxi; Tommy Lucas (E) Mendenhall; Bo Aldridge (T) Greenwood; Jonny Windham (G) Hattiesburg; Buck Randall (B) Greenwood; Fred Roberts (B) Morton.

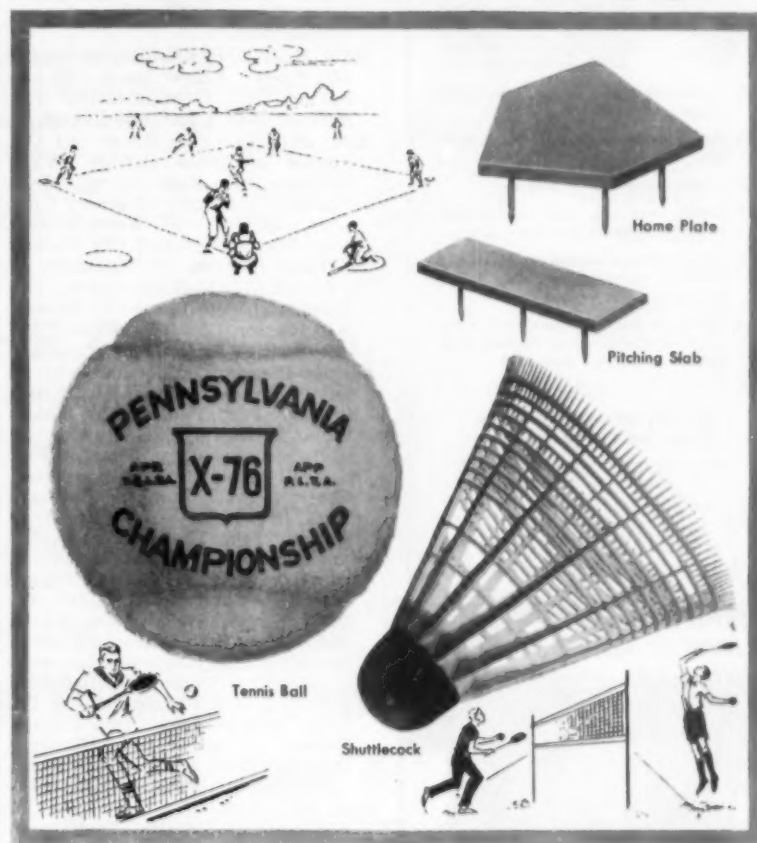
MISSOURI—John Simon (E) University of St. Louis; Scott Videmschek (T) University; John Rappe (G) McKinley of St. Louis; Keith Weber (B) Jefferson City; Doug Madden (B) K. C. Southeast; George Seals (B) Higginsville.

MONTANA—Dave Counsell (E), Dave Seyfert (T), Mike Huggins (B), and Ken Christison (B), all of Flat-

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NEVADA—Al Chicago (E) Sparks; Howard Greene (T) Las Vegas; Dennis Kantor (B) Las Vegas; John Echave (B) Humboldt of Winnemucca.

NEW HAMPSHIRE—Roger Young (E) Exeter; Ernest Smith (T) Laconia; Don Grandmission (B) Nashua; Martin Day (B) Exeter.

NEW JERSEY—Pete Meyer (E) Columbia of South Orange; Wally Florence (T) East Orange; John Sorino (T) Lincoln of Jersey City; Leroy McCoy (G) Newark East Side; Wayne Demikoff (B) Clifton; Herman Johnson (B) Plainfield.

NEW MEXICO—Glen Gares (E) Tucumcari; Pete Jessee (T) Artesia; Don Rierson (B) Las Cruces.

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NORTH CAROLINA—Jerry Rowe (E) Asheboro; Fred Smith (T) Raleigh; Ronnie Woods (T) Morehead City; Bernice Rigsbee (T) Durham Northern. Backs: Ed Wheless, Asheboro; Glen Ogburn, Morehead; Larry Rudisill, Hickory; Phil Raiford, Charlotte Garinger; Bob Jameison, Greensboro.

NORTH DAKOTA—Arden Smutzler (C) Grand Forks; Steve Duginski (B) Shanley of Fargo; George Weller (B) St. Mary's of Bismarck.

OHIO—Ends: Jim Snowden, Youngstown East; Keith Smith, Dayton Dunbar; Al Grigaliunas, Cleveland Benedictine; Tim Ziemke, Sandusky; James Presley, Brilliant; Haze McKee, Massillon. Tackles: Dick Evey, Springfield; Dave Disbrow, Elyria; Jim Bearss, Toledo DeVilbiss. Guards: Al Paone, Alliance; Ron Foreman, Kettering Fairmont. Centers: Larry Zeno, Akron St. Vincent. Backs: Pete Porietis, Marion Harding; Howard Murphy, Springfield; Ray Martin, Lorain; Jones Davis, Cleveland East; Bill Hall, Ironton; Joe Sparma, Massillon.

OKLAHOMA—Doyle Ivester (E) We-woka; Kelly Hampton (T) Grove;

Palmer Koontz (G) Tulsa Central; Jim Nash (G) Okmulgee Dunbar; Tom Farris (C) U.S. Grant of Okla. City. Backs: Mike Miller, Oklahoma City Northwest; C. B. Speegle, Okla. City Capital Hill; Charles Mayhew, Ada; Wayne Scott, Marlow; Larry Ballard, Claremore; Jim Stevenson, Muskogee.

PENNSYLVANIA—Ends: Jack Searer, Lewistown; Bernie Solich, Johnstown; Lou Fogle, Franklin. Tackles: George Bednar, Kingston Catholic; Roland Mudd, Braddock. Guards: Rich Scolio, Erie Cathedral; Paul Fedor, Lancaster; John Yanchuck, Coal Twp. of Shamokin; Lou Shimo-skie, Northampton. Center: Ed Lucyk, Mahanoy Area. Backs: John Jacobs, Braddock; John Price, Wilkes-Barre Meyers; Bob Kopich, Minersville; Ron Alexander, New Castle; Mike Strick, Shamokin; Charles Weaver, Easton; Bob Johnson, Monongahela; Joe Begany, Richland Twp.

RHODE ISLAND—Jim Lyons (E) Warwick; Leander Prince (B) Rogers of Newport; Roland Rodriguez (B) Bristol.

SOUTH CAROLINA—Ted Petoskey (E) Dreher of Columbia; Walter Cox (T) Clemson; Sonny Pitts (T) Ware Shoals; Ken Richey (G) Greenwood; Jerry Taylor (B) Winnsboro; Jimmy Howard (B) Clemson.

SOUTH DAKOTA—Joe Sweere (E) Sioux Falls Cathedral; Dick Callahan (B) Sioux Falls Washington; Roland Johnson (B) Milbank.

TENNESSEE—Denny Revel (E) Kingsport; Glenn Sexton (T) Nashville Cohn; Paul Chapman (T) Chattanooga Central; Duke Volmer (C) Menphis Catholic; Wally Bridwell (B) Kingsport; Art Guepe Jr. (B) Nashville Ryan.

TEXAS—Ends: Dwayne Lee, Waco. Tackles: Glenn Dixon, Breckenridge; Billy Edwards, Ralls. Guards: Scott Appleton, Brady; Bobby Gambelin, Stamford. Centers: Wendell Robinson, Stamford; Ken Henson, San Angelo. Backs: Jerry Gibson, Breckenridge; Hix Green, San Antonio Jefferson; Geary Taylor; Amarillo Tascosa; Jim Linnstaedter, Brenham; Harold Philipp, Olney; Billy Gannon, Highland Park; Charles Lipsey, Cisco; Jerry Rogers, Corpus Christi Ray.

UTAH—Jay Dee Clark (G) Bountiful; Wayne Smith (B) Highland of Salt Lake.

VERMONT—Don Allard (E) BFA of St. Albans.

VIRGINIA—Bill Simpson (E) Dublin; Gaither Musgrove (T) Herndon; Bob Gregory (C) Roanoke Jefferson; Butch Nunnally (B) Manchester of Richmond; Bill Davis (B) Franklin County; Don Yontz (B) Saltville.

WASHINGTON—Bill Zenk (E) Tacoma Wilson; Russ Johnson (T) Seattle Roosevelt; Leonard Morgan (G) Olympia; Mike Monahan (B) Walla Walla; Les Rucker (B) Davis of Yakima; Mac Arrington (B) Chehalis; Gary Gagnon (B) Port Angeles.

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"Here Below"

(Continued from page 5)

each team is pretty well-matched and can go get the boys they want.

"In college there's a vast difference in material, but the lack of a limitation on continuous possession is a great equalizer. There'd be extremely few upsets if the colleges went to the time limit.

"Another reason I'm against it is that I think it would eliminate the little man from the game, as it has done in the pros. The game would turn into a contest of brute strength to get the shot off quickly. The place of the little man, the quarterback . . . is essential to a ball-control team. And you can't have ball-control teams when a time limit is involved."

Frank's arguments, which also apply to the schoolboy game, are good ones, indeed. But at least one point demands elaboration. In too many instances, "ball control" is a euphemism. It's a pretty word for a dreary slow-down, designed not as an offensive weapon but principally as a tool with which to withhold the ball from a superior opponent as long as possible.

Sure it's a smart stunt. But is it basketball? We say no. Everytime you see one of those anachronistic 35-28 scores, you can bet your aching backboard one of the teams played a "ball-control" offense.

We don't mean to impugn teams like Oklahoma State University, which play a genuine ball-control game—that is, moving the ball cautiously in a pattern until the good shot presents itself.

That brings us to the nub of the question: How much ball-control does a team need to get that good shot? With the perfection of jump shooting and the quick one-hand set, does any offense really need more than 30 seconds to produce the "good" shot?

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So here it is, 1960, and the argument, while not exactly "raging," is still a much-debated item. We line up solidly behind Adolph Rupp when he says:

"I certainly believe that the zone is a menace to basketball. It's eliminating much of the spectacular from the game because it obviates rugged defense and excellently timed plays.

"I know there are those who say that every coach ought to be able to develop an offense to meet any kind of a defense. I think we can do that at Kentucky as well as anybody, and records will prove it. But the zone will always remain a menace because it makes a dull game out of a spectacular game."

ANYTIME the schoolboy fathers in New York City want a gym knocked down, they don't bother calling a wrecking crew. They just turn Gary Gubner loose with a shot put.

The baby whale from DeWitt Clinton High, one of our All-American putters, started the current indoor season by wrecking two gyms! The drama in three chalk-circled acts began at the Fashion Trades H. S. gym, scene of the shot put in the Cardinal Hayes Games.

Gary took four throws—and it was Hiroshima all over again! The iron ball smashed a light fixture and dislodged four chunks of plaster from the ceiling! So Gary was ordered to report to a larger gym the next day.

On his first throw he broke another light fixture. On his second he missed the ceiling but dented a basketball backboard 65' away!

The confused officials again huddled. This time they decided to give Mr. Clean one more throw—in a still larger gym. Next day, everyone heaved a sigh of relief when Gary putted 60-7½ without destroying a single facility.

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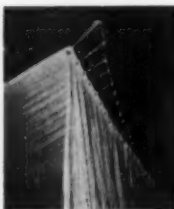
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Developing the Curve Ball

(Continued from page 26)

rotation to the ball, adding to the sharpness of the break.

To return for a moment to the importance of the middle finger and the necessity of avoiding "pushing" the curve ball: A good curve will often leave the pitcher with the feeling of having "pulled the ball" with his middle finger. The calluses often found on that digit of good curve ballers will attest to the fact.

The curve should, of course, be hidden from the batter to the fullest possible extent. For that reason, the wrist and elbow shouldn't bend in toward the head until the arm is moving forward.

The temptation to "crook" the arm prematurely is often present due to a pitcher's anxiety to get something extra on his curve. The desire to do so must be controlled. Too much snap or elbow bend isn't necessary; a good sharp twist should suffice.

The object of all this is to make the curve-ball motion appear the same to the hitter as for the fast ball. A key to spotting the fast ball—as opposed to the curve—is the appearance of more white (the ball) as the arm comes forward. An exaggerated wrist and elbow bend contributes to this contrast between the two by its greater concealment of the ball from the batter.

Masking one's intentions is, of course, desirable, and concealing the ball until the last possible moment is highly important. The idea here, however, is to achieve the effect of making the fast ball and the curve appear similar to the batter when he picks them up visually. Thus, it's good practice to "show a little white" on both pitches.

The wisdom of adopting the same grip for both fast ball and curve has been mentioned previously. It's an invaluable device in keeping the enemy from "reading" one's pitches and, where feasible, should definitely be put into practice.

Yet its need isn't so compelling that it should be allowed to detract from the quality of a man's curve merely for the sake of similarity of grip. In other words, a pitcher shouldn't sacrifice his best stuff for a particular grip on the ball. The primary consideration should be imparting the greatest possible spin to the ball and acquiring a sharp curve thereby, regardless of what grip must be used in order to do so.

While the pitch shouldn't be telegraphed, it's nevertheless entirely unlikely that a batter will be able to exploit such advance knowledge if he doesn't discover it until the pitcher's arm is well into its forward motion. The time interval in this case is too minute for the difference in finger position to bear heavily on the situation.

Thus, the best policy is to use the

grip which produces the best curve, keeping it concealed from the batter long enough to nullify the effect of possible discovery and hiding it from the baseline coaches until the actual throwing motion has begun.

Where a sidearm fast ball is thrown, even if only on occasion, a curve should be delivered from the same angle. Unfortunately, a sidearm curve isn't only flat in its action, but cannot be made to break as sharply as one thrown overhand. Its value against a batter who swings from the opposite side of the plate is doubtful, since it breaks straight in to him.

Yet it's a potent weapon if for no other reason than that it gives needed variety to a pitcher's repertoire. Moreover, a sidearm curve won't be so flat when the pitcher delivers it with a slightly open stride. By the same token, a natural sidearm may improve his curve and its effectiveness by opening his stride slightly when throwing his curve ball.

THE SLOW CURVE

Baseball's better pitchers throw a change-up off the curve as well as the fast ball. This immediately gives them one more pitch with which to work on the batter. A thoughtful approach will show that the slow curve can be, in itself, the most effective pitch in a hurler's repertoire because it will provide him with a single delivery that can fool the batter on both a horizontal and vertical plane.

Several of the principles used in throwing a fast curve quite naturally apply to the slow one. One which differs radically and which is very important is the use of a longer stride and the dragging of the rear foot. Its great value lies in the fact that it allows a normal curve-ball arm-motion and wrist-snap to be used while decelerating the speed of the pitch, thus promoting a slow curve with a good break.

The slow curve can also be thrown (1) with a loose grip, the rule-of-thumb being the looser the grip, the slower the pitch; (2) by keeping the elbow relatively close to the body for an overhand delivery, thus preventing the full-arm sweep which imparts speed to a pitch; (3) by using more body motion, thus dissipating most of the force in this action rather than in the sweep of the arm; and (4) by raising the fingers and tightening the wrist action, just as in the straight change.

Any of the above ideas might prove helpful in acquiring the knack of throwing a change-curve. Regardless of the technique used, this pitch should be practiced diligently in the same manner advocated for developing a good curve ball. That is, the process should be gradual with the pitcher

spinning the ball from a short distance and working back to the full 60' 6", striving for a deceptive motion and maximum rotation while so doing.

An aspiring pitcher should, quite naturally, use the method which gives him the best results, keeping in mind that the slow curve should be gripped well back in the hand since this technique prevents a man from throwing the ball fast while still enabling him to impart good spin to it.

In considering the data presented thus far, it's obvious that experimentation is needed until the pitcher succeeds in arriving at the right combination of techniques that gives him the best curve ball of which he's capable. Any or all of the suggestions which have been enumerated might help and can be applied according to the needs of the individual.

The principle of building up to the task by throwing for maximum spin at short distances will prove a great boon in learning and perfecting the curve, particularly when stress is placed on the observance of the basic fundamentals at each stage in its development.

In brief, these essential ingredients are: a comfortable grip, similar to the fast ball where feasible; heavier pressure on the middle finger; any adjustment of the stride that may be necessary; a full-arm sweep; release of the ball off the ends or sides of the fingers with good elbow and wrist-snap; and keeping the ball low and away, with an emphasis on the word "low."

"Coaches' Corner"

(Continued from page 38)

his pet targets, Dodger president Walter O'Malley:

"If three games are required to break the tie and let the World Series proceed, two days behind schedule, Walter the Wildflower of Smogville will lose the Sunday date at his make-shift ball park in the Coliseum, which he has been counting upon to produce the largest receipts ever for a World Series game. Already suffering from the Brooklyn ailment, fallen archeries, from toting his gold to the bank every day, Walter could develop hardening of the artilleries from this setback. Meantime, his Flatbush idolators are on the verge of dementia peacocks not to mention delirious trimmings, worrying that Walter won't become a billionaire."

You're got to hand it to Notre Dame as a pro-league "nursery." Guess how many football pros the Fighting Irish has turned out since 1921? Get this: 178! No other school has produced as many as 100.

Other leading incubators for the pros include: Pittsburgh, 99 players; Ohio State, 97; Southern Cal, 93; Minnesota, 89; Illinois, 75; Wisconsin, 74; Michigan, 71; and Alabama, 70.

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Swimming Survey

(Continued from page 49)

Following mentioned once: Rhythm, speed, body time, flexibility, depends on attributes of team, interval training, selection of goals, equal time all phases—20% kicking, 20% pulling, 30% distance, 20% sprints.

What would you say are the weakest features of your program? Insufficient time, 14; not enough individual instruction, 11; sixty-foot pool, 6; too many on squad to get a sufficient work-out, 6; no school pool, 4 (one team 10 miles from pool); diving, 5; only one coach, 4; no seating capacity, 3; not enough space, 3; no separate time for diving work-out, 2; boys won't work, 2.

Mentioned once: Weak summer program, lack of meets, conflict with basketball schedule, best athletes go to other sports, poor junior high program, one work-out per day, school scheduling (vacations and exam periods interfere with conditioning program), no weight program, other coaches not interested in swimming, feeling that swimming is an inferior sport, lack of strong competition, conflict with girls' phys ed program during boys' competitive season, failure to develop really topnotch swimmers, work-outs not varied enough to prevent depression on part of swimmers.

What are the strongest features? School interest, 9; summer program, 5; high class boys participate, 4; willingness to work, 4; desire, 4; good record, 3; large squad, 3; prep school (regulated life, no dating or running around nights), 2; tradition, 2; community interest, 2; boys set high goals, 2; junior high program, 2.

Mentioned once: Water polo, interest of administration, grade school program, rewards, loyalty, parental interest, two pools, three pools, good competition, good facilities, good morale, organization, good YMCA program, good country club program, early start on conditioning program, progressive swim program in physical education, 3 divisions of competition give every boy a chance to compete (California), many boys have won collegiate scholarships, constant variations of training program, excellent newspaper coverage, 132 boys on squad and every boy is in a meet every week, unity of group under adverse conditions, first two weeks prior to season top varsity stroke specialists assist in teaching strokes.

Additional comments:

Make kick drills competitive.

Post top ten in each stroke.

Need for most states to attempt to catch up with strong states such as Michigan and California.

Sand bags can be used instead of regular weights.

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Since it's impossible to travel great distances on the high school level, why not hold national postal competition to provide opportunities to keep up with performances of other teams throughout the country?

We should try to sell uniformity of rules in all swimming and diving events whether it be FINA, AAU, NCAA, or interscholastic competition.

A separate interscholastic rules book instead of a pigeonhole in the present NCAA book.

The Shot Put

(Continued from page 22)

more gradual build-up during this the final stage of "blasting off."

Mathew learned a valuable lesson last spring when trying for the school record that has stood since 1932. One of his puts in a meet looked and felt particularly good. So, although he was on balance and in no danger of falling out, he ran out to see where the shot was going to land.

He arrived "before the dust had cleared" to see that he had indeed broken the record. But he almost immediately realized that his exuberance had cost him a legal put. Perhaps that was one time when we could say the explosion came a little too late!

Coach and athlete will have many practice sessions in which they'll discover the little things that build success—discoveries that will fairly make them "vibrate."

It's indeed surprising how exciting an event can become once you learn a little about it—and have a young man coming back who'll certainly go over 60' with an outside chance for a new state record of 65'!

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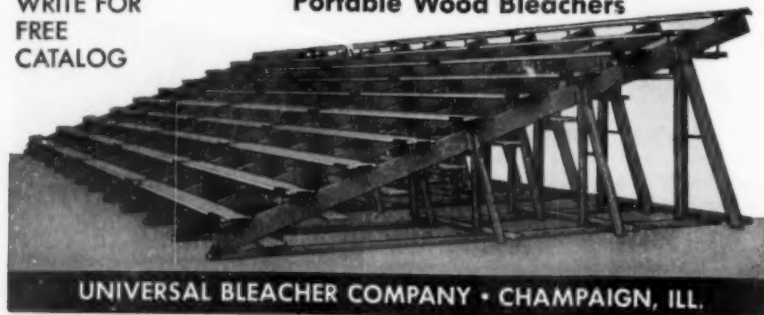
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UNIVERSAL BLEACHER COMPANY • CHAMPAIGN, ILL.

Coaching Baseball

(Continued from page 43)

Pitcher's Post-Game Chart:

This chart is available to the pitcher the morning after the game. It lists for him (and the catcher) an analysis of the game as follows: weather conditions, batters faced, hits, runs, bases on balls, earned runs, a list of innings with the number of pitches thrown, total pitches, average pitches per inning, average pitches per batter, number of times the first pitch was a strike, and comments by the coach.

Each chart has space for 10 games, and enables the coach, pitcher, and catcher to make comparisons and to check trouble spots such as weakening in certain innings.

Batter's Chart on Advancing Base-Runners:

The basic objective of this chart is to aid in proper batting order and determine which players move the runners and hit best in the clutch. It lists all players who played in a game and is available to the team the following day. It lists runners to bat, results at bat, total bases-runners advanced, sacrifices attempted, sacrifices successful, runs batted in, runners left on base, and comments by the coach.

We compute, using a percentage system, an evaluation of our success in advancing runners (by individuals and the whole team). This chart not only gives additional insight into a player's offensive worth, but keeps the boys aware of the importance of advancing runners and hitting in the clutch.

During the regular season, as in spring training practice, schedules must be posted each day. Players work in groups, utilizing every minute of practice time.

We try to make them continually conscious of the importance of speed in baseball. To build the proper attitude, a stopwatch is used to time them in going from home to first, first to third, first to home, second to home, and to time defensive maneuvers such as relays and double plays.

We also attempt to make every player part of the game, whether or not he's playing. Our bench is our "tenth man." We keep it alive by building the attitude that each boy is learning something on every play.

Our bench becomes extremely valuable in studying the quality of the opponents' defense and spotting their weaknesses offensively and defensively. It also proves valuable in stealing a great many signs.

ARTHUR V. HARTER

BOTH sports and the sporting goods industry suffered an irreparable blow when Arthur V. (Dad) Harter, president and manager of The House of Harter, Indiana's largest wholesale and retail sporting goods establishment, recently passed away at the age of 64.

A lifelong resident of Goshen, Ind., beloved "Dad" was an avid sports fan who attended thousands of college and high school games throughout the midwest. He was the confidant of many coaches, and contributed generously toward the education of many needy high school athletes.

At Goshen High School, Mr. Harter was an outstanding baseball player. While building The House of Harter, "Dad" also served as manager of the old Goshen Elks, one of the finest semi-pro football teams in the midwest in the early 1920's.

Surviving Mr. Harter are his wife, a daughter, and a grandson. Both his wife (Frances) and his daughter (Mrs. Jean Bertolino) have been associated with Mr. Harter in the operation of the business.

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...like a Harpoon!
half to
¾ of a
mile!



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GYMNASTIC SUPPLY COMPANY

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- ☐ Brochure on Hurdles, Crossbars, Standards, Vaulting Poles, Blocks

AMERICAN WIRE (36)

- ☐ Folder on Locker Baskets and Uniform Hangers

ARNETT, RICHARD W. (39)

- ☐ Information on Arnett Starting Blocks

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- ☐ Brochure on Transistor-Powered Megaphone

AUSTIN, R. E. (41)

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BERLIN CHAPMAN (58)

- ☐ Details on Pak-A-Way Golf Driving Range

BIKE WEB (32-33)

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- ☐ Catalog of Scoremaster Electric Scoreboards

BUCHANAN MACHINE (64)

- ☐ Information on Rebound Tumbling Bounce-A-Leen

CHICAGO ROLLER SKATE

- (Inside Back Cover)
☐ Details on Roller Skating Programs and Equipment

COACHING CLINICS

Further information on:

- ☐ Capital Football (56)
☐ Nassau Cty. Football (56)
☐ National Football (52)

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- ☐ Booklet, "26 New Indoor and Outdoor Games"

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SEE PAGE 64 FOR OTHER LISTINGS AND FORM FOR SIGNATURE

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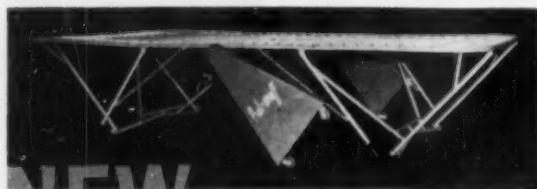
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- ☐ Information on M-F Heel
Protector

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POCONO FAB. (18)

- ☐ Catalog on Adjusta-Bar
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PORTA SPORT (63)

- ☐ Brochure on Goals, Cages
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PREMIER ATH. PRODUCTS (62)

- ☐ Catalog of Complete
Line of Gym Mats

PROTECTION EQUIP. (36)

- ☐ Catalog on Football Pro-
tective Equipment

RALEIGH RECONDITIONERS (Back Cover)

- ☐ Information on Recondi-
tioning Service
☐ Information on Stop-Shoc
Mats

RAWLINGS (3)

- ☐ Folder on Football Equip-
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RICH & CO. (47)

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UniMac (2)

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Laundry Equipment

UNIVERSAL BLEACHER (62)

- ☐ Catalog of Portable
Wood Bleachers

UNIVERSITY ATH. EQUIP. (61)

- ☐ Information on Track or
Swimming Score Book

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(Principal, coach, athletic director, physical director)

SCHOOL _____ ENROLLMENT _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

No coupon honored unless position is stated

February, 1960

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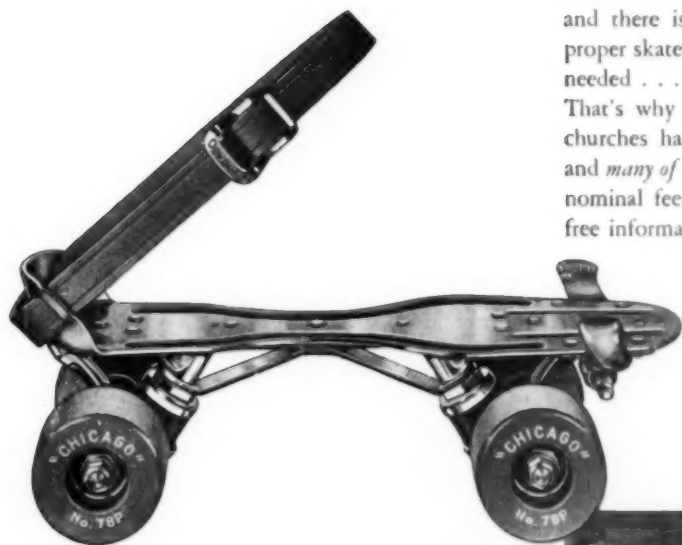
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